CONSTRUCTION NEWS

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CONTENTS.

CONSTRUCTION NEWS:

Railways 261
Electric Railways 261
Light and Power Plants 262
Bridges 262
Buildings 263
Water Supply and Irrigation 264
Sewerage 265
Garbage Disposal 265
Streets and Roads 266
Industrial Works 266
Miscellaneous Contracts 267
U. S. Possessions and Cuba 268
Contract Prices 268
Plans and Specifications on File 269
List of Contracts Pending 269
READERS' WANTS 269
EXAMINATIONS 268
INDUSTRIAL NOTES 269
TRADE PUBLICATIONS 270
PROPOSALS 270

RAILWAYS.

Maine.—Eastern Maine R. R.—It is reported that surveys are being made by this company for an extension of its line from Bangor to Houlton, a distance of 108 miles.

✚Massachusetts—New York, New Haven & Hartford Ry.—The contract for the building of a new line from Springfield to Bondsville, has been awarded to C. W. BLAKESLEE & CO., New Haven, Conn. The estimated cost is $1,500,000. Edward Gagel, New Haven, Conn., Ch. Engr.

New York, N. Y.—Long Island R. R. —Final orders have been issued to this company for the elimination of all grade crossings on its line by the Public Service Commission. The present order covers five crossings on the main line and two on the Montauk Division. The estimated cost of these improvements is $1,000,000. J. R. Savage, Jamaica, is Ch. Engr.

New York—New York Central & Hudson River R. R.—The purchase of control of the New York Ontario & Western Ry. from the New York, New Haven & Hartford has been announced. At the same time the control of the Rutland R. R. was sold by the New York Central to the New York, New Haven & Hartford.

New York.—Corning, Keuka Lake & Ontario R. R.—This company has made application for a charter to construct a line from Corning to Sodus Bay, a distance of 90 miles.

Virginia.—Carolina, Churchfield & Ohio R. R.—It is reported that this company has started surveys for an extension from Laurel Junction, Va., to Elkhorn City, Ky., a distance of 33 miles. M. J. Caples, Johnson City, Tenn., is Gen. Mgr.

✚Georgia.—Hawkinsville & Western R. R.—The contract for laying 21 miles of track, from Hawkinsville to Perry, has been awarded to J. F. LAMB, Thomasville. G. T. Lemmon is the engineer in charge of the work.

Georgia—Shearwood Ry. — Application for a charter to construct a line, 50 miles in length, from Brooklet to Claxton, Egypt and Clyo, has been made. John A. Calhoun, Philadelphia, Pa., is one of the incorporators.

Alabama—Birmingham & Chattanooga R. R.—Application for a charter to construct a railway has been filed by this company. The line will run from Chattanooga, Tenn., via Albertville and Boaz to Birmingham. J. M. Spradlin, Boaz, is Pres.

Mississippi.—Gulf & Northwestern R. R.—It is reported that a company bearing the above name will soon be incorporated for the purpose of constructing a line from Pascagoula to the mineral region of Alabama. William H. Skaggs, 1024 Lawrence Ave., Chicago, Ill., is interested.

Louisiana.—Memphis, Arkansas & Louisiana Ry.—This company has been incorporated for the purpose of building a 375-mile railway, to run from Port Barre, La., to Memphis, Tenn. The capital stock is $25,000,000. The line will connect with the St. Louis & San Francisco at Memphis. B. L. Winchell is Pres.

Tennessee.—See item under Miscellaneous Contracts—Subways, Memphis, Tenn.

Indiana.—Southern Ry.—This company is planning to let contracts for an extension of its line from Evansville to Louisville, Ky.

Indiana.—Illinois Central R. R.—This company will soon let a contract for the construction of an extension of its line to the stone belt, south of Cedar Creek, and eventually to Bedford, French Lick, and Evansville.

Illinois.—Decatur, Pana & Southern Ry.—This company has recently been incorporated and will construct a line from Decatur to Pana, a distance of 40 miles. The headquarters will be in Decatur. H. G. Hodgkins, 172 Washington St., Chicago, Ill., is one of the incorporators.

Montana.—Columbus North & South R. R.—Surveys have been completed for the construction of a line from Fishtail to Shawmut, a distance of 21 miles. A. L. Thomas, Columbus, is interested.

✚Missouri.—Chicago, Rock Island & Pacific R. R.—It is reported that contracts have been awarded by this company as follows: to C. H. SHARP CONTRACTING CO., Kansas City, to build from Malvern, Ark., to Camden, a distance of 58 miles; to the MacARTHUR BROS. CO., Chicago, Ill., to build from Carlisle, La., to Allerton, La., a distance of 64 miles.

Texas—Plans are being contemplated for the construction of a railway from Houston to Henderson. Charles L. Brachfield, Henderson, is interested.

Washington.—Northern Pacific Ry.—Plans for grade crossing elimination, in the wholesale and jobbing district in Spokane, involving an expenditure of $3,500,000, and the construction of new shops and a roundhouse, costing $500,000, at Parkwater, have been officially announced by Mr. Thomas Cooper, assistant to Howard Elliot, the president of this company. Work will soon begin on six of the eight tracks to be elevated, and it will take three years to complete the entire project.

The plans, as announced by Mr. Cooper include the following items: (1) the elevation of all the tracks about 14 ft., from a point east of Division St. to the west end of the city; (2) eight tracks will be constructed, running through the business district, of which four will be main tracks, the others being industrial and connected with the switch tracks of the jobbing houses. The whole work involves the elevation of about 20 miles of track, the construction of 20 steel and concrete bridges, and the filling in of 800,000 cu. yds. of earth.

Washington.—Northern Pacific Ry.—It is reported that bids have been asked for the construction of a tunnel at Ruston, for the proposed Point Defiance line of this company. W. L. Darling, St. Paul, Minn., is Ch. Engr.

Washington.—Seattle & Olympic Peninsular R. R.—This company has been incorporated and will construct a line from Port Townsend or Port Ludlow, or both, to Port Angeles, and then west to Lake Crescent. Michael Earles, Seattle, is one of the incorporators.

California.—Clear Lake R. R.—The directors of this company have voted the sum of $400,000 to complete the construction and equipment of the line from Hopland to Lakeport.

California.—Southern Pacific Co.—Plans have been completed by this company for the construction of a line, connecting the most important towns of Alameda and Contra Costa Counties with Oakland. The estimated cost is $1,500,000.

California—Sacramento & Eastern Ry.—Articles of incorporation have been filed by this company. The road will extend from Sacramento to Folsom and is incorporated at $1,000,000. The incorporators are Chas. H. Hammon, Berkley; Leon J. de Sabla, San Francisco; Samuel Lillienthal, San Francisco; George E. Springer of Oakland, and Herbert W. Furlong, of Pleasantville. The road will be approximately 60 miles in length, running southeast from Sacramento to a point midway between Sacramento and Folsom.

Quebec.—Canada & Gulf Terminal.—It is reported that an extension of the line from Matane to Gaspe Basin, a distance of 189 miles, is contemplated.

Ontario.—Canadian Pacific Ry.—Plans have been filed by this company for the construction of a new line from Montreal to Toronto, via the Lake Shore route. The plans provide for the new line leaving the present tracks at Glen Tay, thence southwesternly to Belleville. It then follows the shore of Lake Ontario, to Toronto. The total distance of the new line is about 200 miles. J. M. R. Fairburn, Montreal, is Ch. Engr.

Alaska.—Plans for a large railroad and navigation system in Alaska are being prepared by Conrad Siem, Secy., The San Francisco-Alaska Club. It is proposed that the control be shared equally by the U. S. Government and private individuals. The plan is to unite the three existing roads in Alaska with this new one, under one company.

✚British Columbia—Canadian Northern Ry.—This company has awarded a contract to MOORE & POTHICK, Victoria, for the construction of 40 miles of the Vancouver Island line, from Mile 60 to Mile 100.

ELECTRIC RAILWAYS.

(*✚Denotes a contract awarded.*)

Corning, N. Y.—The Corning, Keuka Lake & Ontario Ry. Co. has asked the Public Service Comn., Second District, for permission to build a railway connecting Corning, Savona, Bradford, Penn Yan, Geneva and Sodus Bay, about 80 miles.

Liverpool, N. Y.—The Syracuse Rapid Transit Co. is preparing plans to double track its line to Liverpool and extend a double track line through Liverpool. T. H. Mather, 500 Onondago County Savings Bank Bldg., Syracuse, N. Y., is Ch. Engr.

Atlantic City, N. J.—The West Jersey & Seashore R. R. Co. is considering plans to elevate its tracks here in connection with the construction of its new terminal. A. C. Shand, Philadelphia, Pa., is Ch. Engr.

Erie, Pa.—The Buffalo & Lake Erie Traction Co. is planning to build an extension on Twelfth St., from East St. to the city limits. C. A. Alderman, 50 Clinton St., Buffalo, N. Y., is Ch. Engr.

Limerick, Pa.—The Pottstown & Phoenixville Ry. Co. is planning to build a 1-mile extension in Limerick. George N. Malsberger is Pres.

Lititz, Pa.—The Conestoga Traction Co. is making surveys between Lititiz and Rothsville for a railway. The right-of-way has been secured and construction work will be started in the spring. H. W. Crawford, Woolworth Bldg., Lancaster, Pa., is Ch. Engr.

Palmyra, Pa.—The right-of-way is being secured for an electric railway between Palmyra and Campbelltown. M. S. Hershey and associates are interested.

Florence, S. C.—An electric railway between Raleigh and Florence is projected. Charles E. Johnson, Pres., Yadkin River Power Co., Raleigh, N. C., and his associates are interested, it is reported.

✚Key West, Fla.—A contract has been awarded by the Key West Electric Co. to FERGUSON & WARD for the rebuilding of its lines. S. B. Tuell, Key West, is Mgr. and Pur. Agt.

Indianapolis, Ind.—The Southwestern Traction Co. has made application for a charter in Indiana for the purpose of constructing a railway between Mooresville and Sullivan by way of Eminence, Cloverdale, Cataract, Clay City and Terre Haute. Directors are Joseph A. Davidson, John W. O'Hara, Gilbert Bray and F. F. James.

Richmond, Ind.—The Richmond & Portland Traction Co. have about completed the final survey for an interurban line from Richmond to Portland. Contracts will be awarded in the early spring. A. A. Bartel is interested.

Ogden, Iowa.—The Boone Electric Co. plans to construct an extension to Ogden. The line will cross the Des Moines River north of the Chicago & Northwestern Ry. viaduct. John Reynolds, 923 Eighth St., Boone, Iowa, is Pres. and Gen. Mgr.

Sioux City, Iowa.—The Sioux City, Crystal Lake & Homer Ry. contemplates building extensions from Dakota City to Homer, Neb., and from Sioux City to South Sioux City. J. A. Foye, Sioux City, is Pres. and Gen. Mgr.

Spearfish, S. Dak.—Spearfish and Bellefourche capitalists are interested in the construction of the line projected by the newly incorporated Bellefourche & Spearfish Electric Ry. A. A. Moodie, of Bellefourche, is interested.

Austin, Tex.—J. V. Watkins, Pres. of the Trinity Valley Traction Co., is investigating the matter of constructing an interurban electric railway from Marlin to San Antonio by way of Temple and Austin. The proposed line will be about 175 miles long.

El Paso, Tex.—It is reported that the El Paso Electric Co. will build a line along North Stanton St., from Arizona to San Antonio Sts.

Nampa, Idaho. — Plans are being completed for the construction of a railway from Nampa to Caldwell, at an estimated cost of $80,000. C. W. Van Kirk is interested.

Forks, Wash.—Plans are being considered by the Gray's Harbor Ry. & Light Co. for an extension of its line to Forks. J. S. Thornton, Aberdeen, Wash., is Gen. Mgr. and Pur. Agt.

✚Seattle, Wash.—A contract for the construction of the Highland Park and Lake Burien electric line has been awarded to MACQUADE & MOORE.

Grants Pass, Ore.—Surveys have been made by the Grants Pass & Rogue River Ry. for a line through

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CONTEMPLATED STREET IMPROVEMENTS IN ARKANSAS CITIES.

By E. A. KINGSLEY, M. Am. Soc. Municipal Improvements.

On account of the peculiar law governing improvements, municipalities in Arkansas have been necessarily slow in street paving. The constitution adopted in 1874 for the State contains a provision prohibiting bonds or other general interest bearing evidences of indebtedness. To get around this, however, a method was provided for a legislative enactment to provide that sections being parts of municipalities, might by petition be organized into districts. This is the only method by which bonds can be issued for paving purpjoses.

While this improvement law has a great many splendid features, it is very cumbersome in its workings and throws the burden of effort, work and expense upon the progressives. Every advantage is given under this law to the opponents of progress and to the large holder, who has bought tracts of property to hold vacant for future increased values. The limits of legal expenditure have been placed so low that only the better settled and more valuable property can come inside these limits.

Within the past few years the whole state has taken on new life and energy in reference to street improvement. In Little Rock, the last three years have seen the downtown portion of the city pretty well paved with asphalt and creosoted blocks. A number of streets have been paved far out into the suburbs, some of these with vitrified brick. At present, about 50,000 sq. yds. of asphalt paving are under contract or ready to be contracted for in the spring. There are two districts organized which will add at least 30,000 sq. yds. more of asphalt, and petitions are in circulation for about 50,000 sq. yds. of either asphalt or creosoted blocks. The Rock Island Railroad will pave about 15,000 sq. yds. with vitrified brick, in return for depot privileges. There is now under construction 50,000 sq. yds. of creosoted block, which will be finished by late spring.

The work as outlined will assure by Dec. 31, 1912, nearly 200,000 sq. yds., or more than eight miles of additional permanent pavement.

In Argenta, just across the Arkansas River, one half a mile, about 13,000 sq. yds., of creosoted blocks, is under construction, and three-fourths of a mile more will be built in the spring.

In Fort Smith, all the paving has been of brick. A district is now being formed which will resurface the main business street with asphalt or creosoted blocks.

Pine Bluff, the city next in size, has laid considerable brick, and one street of blocks. A contract has just been awarded for a creosoted block street.

In Texarkana, only a small amount of work has been done, that being brick. Some little creosoted block is contemplated for next year.

Helena has laid some brick, and contemplates considerable asphalt for next year.

Honesboro and Marianna have done a little brick paving but have nothing definite proposed for 1912.

Stuttgart contemplates some new work during next year.

Aside from those mentioned, most of the other street work in municipalities will be confined to grading or to macadam work.

the Rogue River Valley connecting Grants Pass, Medford and Ashland. J. Arnold Doyle is Pres.

Bakersfield, Cal.—The City Trustees have passed an ordinance granting the San Joaquin Light & Power Corporation a 49-year franchise to build and operate a street railway on Chester Ave., from 25th to 34th Sts.

Corning, Cal.—Application for a charter to construct a mono-rail railroad has been filed here by F. S. Risley, of Seattle, in behalf of the International Mono-Rail Co. A 20-mile line is projected between Corning and Paskenta, and will be used for passenger and express service.

Oakland, Cal.—The United Properties of California, a company with headquarters in Oakland, has been incorporated. The company intends constructing a line from Oakland to San Francisco. Frank Smith is at the head of the company.

Santa Clara, Cal.—The Peninsular Electric R. R. Co. has been granted the right-of-way to connect Santa Clara with the interurban system at Meridan Corners.

San Jose, Cal.—Plans are being prepared by the San Jose Terminal Ry. for the construction of a line between San Jose and Hollister. This railway will connect San Jose and Alviso, where it will meet with a fast line of steamers that will run to San Francisco. R. Metson and E. H. Lee are interested.

Brandon, Man.—Application has been made to the Council for a franchise to build and operate the water supply, electric light and power and the electric railway systems in Brandon by B. C. Donham & Co., 52 Broadway, New York City.

St. Boniface, Man.—The City Council has been asked for a franchise by the Winnipeg Electric Ry. for the extension of its lines from Marion St. to the southern limits of St. Boniface, following St. Mary's Road. Wilford Phillips, Winnipeg, is Ch. Engr.

LIGHT AND POWER PLANTS.

(**Denotes that this work is advertised in Engineering News.*)

Boston, Mass.—Bids will soon be received for the installation of 11,000 gas lamps. J. E. Mullen is Supt. Supply Dept.

Storrs (Eagleville post-office), **Conn.**—Bids will be received by C. L. Beach, Pres. of the Connecticut Agricultural College, until Dec. 19 for installing various electric wiring systems in the college buildings. Plans and specifications may be obtained at the office of Ford, Buck & Sheldon, 60 Prospect St., Hartford, Conn.

New York, N. Y.—Bids will be received at the office of the Supervising Architect, Treasury Department, Washington, D. C., until Dec. 22, for wiring, etc., in the U. S. Post Office, New York. James Knox Taylor is Superv. Arch.

New York, N. Y.—Bids will be received by the Department of Public Charities, Foot of East 26th St., until 2.30 p. m. Dec. 21. 1. For underground conduit system, transformer vault, electric elevator and other work in the Metropolitan Hospital District. 2. For complete electric wiring and fixtures for infirmary dining room and kitchen, female tuberculosis building, and sun tents, Solarium, Pavilions Nos. 1 to 5, superintendent's residence, carpenter shop, coffin shop, stable, power house and laundry building for Metropolitan Hospital District. 3. For complete electric wiring and fixtures for new Roman Catholic Church, male infirmary and sun tents, and electric motors for laundry for Metropolitan Hospital District. 4. For grounding system, lighting arresters and automatic switches for Metropolitan Hospital District. Plans and specifications may be obtained at the office of Frank Sutton, Consult. Engr., 80 Broadway, New York. Michael J. Drummond, is Comr.

Otisville, N. Y.—Bids will be received by the Board of Health, Department of Health, 55th St. and Sixth Ave., New York, N. Y., until 10 a. m., Dec. 19, for the installation of a hot water heating apparatus in the building occupied by the employees of the Vaccine Laboratory at Otisville, N. Y. Plans and further information may be obtained at the office of the Chief Clerk of the Department of Health. Ernst J. Lederle, Ph.D., is Pres. of the Board of Health.

✚White Plains, N. Y.—A contract has been awarded to the H. WALES LINES CO., Meriden, Conn., by the Westchester Lighting Co. for a sub power station.

Philadelphia, Pa.—Bids will be received by Henry Clay, Dir. Pub. Safety, Room 215, City Hall, until Dec. 11, for furnishing electric arc lamps for the year 1912. Specifications may be obtained at Room 610, City Hall.

Royersford, Pa.—A vote for an appropriation of $30,000 has been carried, to build a municipal electric-light plant.

Washington, D. C.—Bids will be received at the office of the Commissioners of the District of Columbia, Washington, until 2 p. m. Dec. 18, for the installation complete of an electric lighting system in James Ormond Wilson School Building No. 162. Plans and specifications may be obtained from the Chief Clerk, Engineering Department, Room 427, District Bldg., Washington, D. C. Cuno H. Rudolph, John A. Johnston, William V. Judson, are Comrs.

Bids will be received at the office of the Commissioners, Washington, D. C., until 2 p. m., Dec. 18, for heating, ventilating and electric generating installation in the James Ormond Wilson Normal School Building, No. 162. Plans and specifications may be obtained from the Chief Clerk, Engineer Department, Room 427, District Bldg., Washington, D. C. Cuno H. Rudolph, John A. Johnston, William V. Judson are Comrs.

Washington, D. C.—Bids will be received until Dec. 27 at the office of the Supervising Architect, Treasury Department, Washington, D. C., for furnishing and installing lighting fixtures in the United States buildings at Ames, Iowa; Barre, Vt.; Canandaigua, N. Y.; Carbondale, Pa.; Faribault, Minn.; Holdredge, Neb.; Hope, Ark.; Independence, Kan.; Ionia, Mich.; Lagrange, Ga.; Lewiston, Idaho; Lexington, Mo.; Malone, N. Y.; McKinney, Tex.; Missoula, Mont.; North Yakima, Wash.; Pontiac, Mich.; Stevens Point, Wis.; York, Pa.; Bowling Green, Ky.; North Platte, Neb.; Roswell, N. Mex.; San Juan, P. R.; Richmond, Va., and Bath, Me. Plans and specifications may be obtained at the above office. James Knox Taylor is Superv. Arch.

✚Enfield, N. C.—A contract has been awarded to A. D. O'BRIEN, Wilmington, N. C., for the construction of an electric-light plant. The other bidders were J. L. Levers, Lancaster, Pa., Chapman & Mayhew, New York, N. Y., and J. B. McCrary Co., Inc., Atlanta, Ga. C. E. Fairbanks, 417 American National Bank Bldg., Richmond, Va., is Engr.

Augusta, Ga.—The Georgia Carolina Power Co. has been taken over by J. G. White & Co., Engrs., 43 Exchange Pl., New York, and Redmond & Co., bankers, of 33 Pine St., New York, it is reported. A dam to develop about 12,000 HP. will be built at Stevens Creek.

Comer, Ga.—A franchise has been granted by the City Council to the Comer Light & Power Co. to build and operate an electric light plant.

Washington, Ga.—Bids will be received by Boice Ficklin, Jr., City Clk., for constructing a power plant, adding to the present water-works and overhauling the electric-light and power transmission system. Westinghouse, Church, Kerr & Co., New York, have charge of the engineering work. Noted Nov. 9.

Louisville, Ky.—A committee of engineers has reported adversely on the plan of Mayor W. O. Head to harness the falls of the Ohio River for the purpose of furnishing power for commercial purposes. Noted Oct. 26.

Somerset, Ky.—Bids are being received by the United Water, Light & Traction Co. for a 300 HP. combined engine and generator.

Anderson, Ind.—Bids will be received until Jan. 2, by the Board of Public Works for the installation of a turbine engine in the municipal electric plant. The estimated cost is $30,000.

Jennings, Ind.—A 25-year franchise has been granted to C. Johnson to operate an electric plant and a contract to light the streets has been awarded.

Oldenburg, Ind.—The Oldenburg Electric Light, Power & Water Works Co. has recently been incorporated for the purpose of building a combined electrict light, power and water-works plant. Joseph Schmidt and B. J. Kessing are Directors.

Ontario, Ind.—Pigeon River Milling Co. is preparing to build a hydro-electric plant to furnish electricity and power to Ontario, Lagrange and Rome City. The concrete dam, 600 ft. long, will be improved and a power-house built.

Woodburn, Ind.—The Woodburn Gas Co. has been incorporated to build and operate a plant for the manufacture and distribution of gas in Woodburn and vicinity. E. C. Edgarten, Otto Knobland and E. R. Moses are the Directors.

Ann Arbor, Mich.—All bids have been rejected by the Board of Regents of the University of Michigan, Ann Arbor, for the proposed power house. Plans by Smith, Hinchman & Grylls, Engrs., Washington Arcade Bldg., Detroit. New plans will be prepared.

Standish, Mich.—The electric light plant and water-works have been purchased by C. F. Hall, Standish, and improvements will be made.

✚Ingalls, Mich.—Contracts have been awarded by the Menominee & Marinette Light & Power Co. as follows: GENERAL ELECTRIC CO., Schenectady, N. Y., for generators; DAYTON GLOBE IRON WORKS, Dayton, Ohio, for water wheels; WESTINGHOUSE ELECTRIC CO., Pittsburgh, Pa., for transformer and switchboard. The approximate total is $25,000.

La Salle, Ill.—Bids will soon be received by the City Council for 122 arc lamps and two Rush generators of sufficient output to supply 75 lamps each. Noted Nov. 23.

Stewardson, Ill.—The installation of an electric-light plant is considered by the Village Board.

Fond du Lac, Wis.—The water commission is planning to install the necessary equipment and machinery in the water-works station to generate electricity for lighting municipal institutions. Additional boilers and equipment are needed for the pumping stations.

Grand Rapids, Wis.—The Water and Electric Commission is considering the establishment of a gas plant.

Hillsboro, Wis.—The Common Council has voted to establish a municipal lighting plant. An expenditure of about $10,000 will be made.

Milwaukee, Wis.—The County Board has voted to readvertise for bids for furnishing electroliers for the new viaduct over Grand Ave. Vaughan & Meyerm, Milwaukee, are the Electrical Engrs.

Wauwatosa, Wis.—The Milwaukee County Board of Supervisors has prepared tentative plans for a central heating and power station for the group of county institutions at Wauwatosa, to replace present individual systems. The plan entails an expenditure of approximately $75,000. Martin Plehn is County Clk.

Altoona, Iowa.—A vote will be taken on Dec. 16 to determine the advisability of granting a franchise to G. T. Gibson, of Des Moines, Iowa, to install a street lighting system.

Ames, Iowa.—Bids will be received at the office of the Supervising Architect, Treasury Department, Washington, D. C., for the installation of lighting fixtures in the United States public building at Ames. James Knox Taylor is Superv. Arch.

Bayard, Iowa.—The installation of an electric light plant is contemplated.

Braddyville, Iowa.—The installation of a new lighting plant is being considered.

***Fort D. A. Russell, Wyo.**—See item under Miscellaneous Contracts—Elevator.

Eugene, Ore.—No bids will be received for the hydro-electric plant, estimated to cost $50,000, before August, 1912. George M. Miller, Box 35, Eugene, is Des. Engr.

✚Carlsbad, N. Mex.—A contract has been awarded to W. B. KROEGER, of San Antonio, Tex., at $14,650 for the complete installation of an electric-light plant.

Lone Oak, Tex.—The City Council has granted a franchise to J. M. Carsey of Greenville, Tex., W. J. Simpson and J. C. Simpson of Kaufman, Tex., to install an electric light and power plant here.

Waxahachie, Tex.—The Waxahachie Gas Co. has increased its capital stock from $125,000 to $150,000. Improvements will be made to its plant.

Ponca, Okla.—Plans and specifications are in progress for a new municipal lighting plant for which $30,000 bonds have been voted. Burns & McDonnell are the Consult. Engrs.

Leavenworth, Wash.—Plans and estimates are being made for the Washington Steel & Iron Co., Spokane, Wash., for a concrete dam to be built on the Wenatchee River at Leavenworth. A franchise to supply power for lighting has been granted. R. J. Zell, of Spokane, Wash., is the Engr.

Alameda, Cal.—No bids were received by the City Council, Dec. 5, for the erection of electroliers. The Municipal Electric Light Plant will do the work. F. E. Browning is City Clk.

Antioch, Cal.—Van E. Britton, San Francisco, and others, have been granted a franchise by the City Trustees for the establishment of a distributing station in Antioch. Antioch, Pittsburg, Concord and Martinez will be supplied with gas. Similar franchises have been applied for in Martinez and Concord. The plant will cost about $200,000.

Berkeley, Cal.—The installation of a municipal lighting plant is being considered.

Chico, Cal.—An ordinance has been passed by the Board of Supervisors granting to the Pacific Gas & Electric Co. the right to lay gas pipes, mains and conduits in Butte County, in the vicinity of Chico. O. F. Belding is Clk.

Colton, Cal.—The installation of a gas system is being considered by the City Trustees. Bids for the franchise will be received until Jan. 15.

Crescent City, Cal.—Plans are being prepared by James H. Owen for a hydro-electric power plant on the Smith River near here. A transmission line will be built. Sidney Sprout, Engr., of San Francisco, Cal., is in charge of the work.

✚Fresno, Cal.—The San Joaquin Light & Power Co. has awarded a contract to the STONE & WEBSTER ENGINEERING CORPORATION, 147 Milk St., Boston, Mass., for the construction of a power plant and dam at Big Creek, near Fresno.

Los Angeles, Cal.—The following bids were received for installing a heating and ventilating plant, vacuum sweeping plant, etc., in the County Hospital: W. D. Newell, $49,994; Thos. Haverty & Co., $52,900; American Heating Co., $56,338; Blumve & Jay, $60,904. Each bidder submitted alternative bids for changes in the specifications. The Llewellyn Iron Works bid to install two boilers at $9,390 and $8,344, and C. C. Moore & Co. at $9,300.

The following bids were opened by the Board of Public Works for furnishing hydraulic machinery and equipment for the San Franciscquito Power Plant No. 1: Allis-Chalmers Co., Item 1, $144,000; alternate (b) $144,900; alternate (c) $144,000; Item 2, $4,650; supervising erecting engineer, $14.50 per day each; skilled mechanics, $10.50 per day each; if 60-in. gate valve instead of two 32-in. gate valves are used add $7,500 for the three units. Pelton Water Wheel Co., Item 1 $169,855; Item 2, $2,478; Item [illegible] $49,711; Item 4, $1,957; Item 5, $1,4[illegible] supervising erecting engineers, [illegible]3.50 per day; mechanics, $8 per day [illegible] Union Iron Works, Item 1, $201,5[illegible] alternates (a) and (b), $201,755 [illegible]lternate (c), $202,000; Item 2, $12,80[illegible] Item 3, $54,000; Item 4, $38,000; Item [illegible] $4,020, supervising engineers, $12 [illegible]er day each; mechanics, $8 per day.

Martinez, Cal.—The Great Western Power Co. will extend its lines across the straits at Carquinez.

North San Juan, Cal.—The Northern Water & Power Co. is considering plans for the construction [illegible] a dam having a capacity of 500,0[illegible] ins. of water to be located near here.

Pasadena, Cal.—The municipal electric lighting system and plant will be extended and improved. The City Council has authorized an expenditure of about $21,000.

Pomona, Cal.—The Kenoak Improvement Association will award a contract in the near future for the installation of a new lighting system.

Sacramento, Cal.—The Merced River Electric Power Co. has filed articles of incorporation and will acquire water rights, distribute water, irrigate and generate electricity for lighting and power. The directors are Leon M. Cove, H. L. Breed, Charles F. Ross, J. E. Bowes and Milton S. Hamilton.

San Francisco, Cal.—The Feather River Power & Irrigation Co. has recently filed articles of incorporation, and proposes to do business in all parts of California. Additional water power, of the Feather River Canyon, along the line of the Western Pacific Ry., will be developed. R. K. Burrows, of Larkspar; A. N. Lewis, Jr., of Alameda; A. L. Dahl, of San Francisco; H. G. Hill, of San Francisco, and F. C. van Deinse, of Berkeley, are the incorporators.

The State Board of Control will soon award a contract for 25,000 electric bulbs for the state institutions here.

Santa Rosa, Cal.—The Supervisors have passed an ordinance granting the Pacific Gas & Electric Co. a franchise to install and maintain gas pipes, mains and conduits in Sonoma County. W. W. Felt, Jr., is Clk.

✚Tulare, Cal.—A contract has been awarded by the Tulare County Power Co., to OSCAR PARLIER at $10,000 for the construction of a power-house for its auxiliary plant. It is stated that the cost of the entire station is estimated at $250,000.

Montreal, Que.—Application has been made by the Cedar Rapids Mfg. & Power Co. for permission to increase its capital for the purpose of building a hydro-electric power plant at Cedar Rapids about 28 miles from Montreal. An installation of 25,000 HP. will be made and this will ultimately be increased to 150,000 HP. D. Lome McGibbon is Pres., and Henry Redgate is Consult. Engr.

Vancouver, B. C.—The City Electrician is preparing an estimate of about 22 miles of ornamental street lighting.

Pachuca, Mex.—The Fuerza & Ferrocarriles Co., Pachuca, has applied for concessions for the construction of three hydro-electric power plants on the Tula River. About 7900 HP. will be developed and transmission lines to Tula, Jasso, Actopan and other towns will be built. Theodore Branderburg is Gen. Mgr.

BRIDGES.

(*✚Denotes a contract awarded.*)

Boston, Mass.—Plans have been approved by the War Department for a draw span, 350 ft. long and 60 ft. wide, to replace the Chelsea Bridge over the north channel. Estimated cost, $425,000. Louis H. Rourke is Comr. Pub. Wks.

Buffalo, N. Y.—We are officially advised that plans are being prepared for four Bascule bridges over the Buffalo River. The bridge will be constructed for the Lake Shore & Michigan Southern Ry. Co., the New York, Chicago & St. Louis R. R. Co., and the Buffalo Creek R. R. Co. Noted Nov. 30.

Tarrytown, N. Y.—Bids will soon be asked for the construction of a bridge over the Pocantico River at Tarrytown. The cost is estimated at $15,000.

Allentown, Pa.—An ordinance has been passed providing for the construction of a concrete viaduct across the ravine between Allentown and South Allentown. The viaduct will be 1,900 ft. long, 120 ft. high, and will cost $500,000. R. P. Stevens, Allentown, Pres. Lehigh Valley Transit Co., is interested. Noted Nov. 23.

Bendersville, Pa.—Bids will be received until Dec. 14 by the Board of Commissioners of Adams County at Gettysburg, for constructing a 2-span structural steel bridge with wood floor over Opposum Creek at Bendersville. J. A. Kane is Chn. of Bd.

***Baltimore, Md.**—Bids will be received until 11 a. m., Dec. 27, by the City Register for constructing a steel plate girder bridge over the tracks of the Baltimore & Ohio R. R. at South Monroe St. Estimated cost, $40,000. H. K. McKay is City Engr., and James H. Preston is Pres. Bd. of Awards. Noted incorrectly under advertisement in this issue.

Spottsylvania, Va.—Bids will be received until noon, Dec. 18, by the Chairman of the Board of County Supervisors for constructing a 108-ft. bridge over the Po River, and 106-ft. bridge over the north fork of the North Anna River. Both structures are to be steel beam spans with concrete substructures. Plans and specifications are on file at the office of the Clerk of the Circuit Court, Spotsylvania, and at the office of the Childrey Sunday Co., Richmond. P. St. J. Wilson, Richmond, is State Highway Comr.

Atlanta, Ga.—Bids will be received until noon, Jan. 15 by the Chairman of the Bridge Committee at the office of R. M. Clayton, Chief of Construction, for the construction of a steel bridge with reinforced concrete approaches at Bellwood Ave., Atlanta. Plans and specifications can be obtained upon application to the Chief of Construction.

New Orleans, La.—Bids will be received until 11 a. m., Dec. 28, by Charles R. Kennedy, Controller, for the erection of a Strauss trunnion bascule bridge over the Carondelet Walk Canal at Hagan Ave., in accordance with plans and specifications on file in the office of the City Engineer.

Cincinnati, Ohio.—A reinforced-concrete bridge will be constructed over West Fork Creek at Beekman St. Estimated cost, $31,248.

Toledo, Ohio.—Bids for constructing a two-leaf bascule bridge across the Maume River at Cherry St. were received Nov. 25 by J. R. Cowell, Dir. Pub. Ser., as follows: Scherzer Rolling Lift Bridge Co., Chicago, own plan, $125,250, alternative bid, $132,980; Toledo Bridge & Crane Co., city plan, $137,000, own plan, $132,500; Strobel Steel Construction Co., Chicago, city plan, $149,000; Pennsylvania Bridge Co., Beaver Falls, Pa., city plan, $148,400; American Bridge Co., city plan, $192,000. Noted Oct. 26.

+Newcastle, Ind.—A contract for constructing two concrete bridges has been awarded by the Board of County Commissioners to the BURK CONSTRUCTION CO., Newcastle, at $10,000. Noted Sept. 28.

Vassar, Mich.—Bonds for $10,000 have been voted to build a steel bridge over the Cass River at Vassar.

Council Bluffs, Iowa.—Bids will be received by the Board of County Supervisors until Dec. 18 for constructing wooden and steel bridges during the year 1912. J. D. Hannan is County Audr.

New Hampton, Iowa.—Bids including plans, will be received until Jan. 4 by the Board of Supervision of Chickasaw County for the construction of ten reinforced-concrete bridges and for steel bridges with concrete abutments and concrete floors at Sites 2, 3, 7 and 11. John Pickar is Chn. of Bd.

Lawrence, Kan.—Bids will be received until noon, Dec. 14, by the Mud Creek Drainage Board, at the residence of Ernest W. Young, Secy., Lawrence, for constructing a 40-ft. steel bridge with concrete floor, and a 10-ft. culvert with concrete floor.

Grand Junction, Colo.—The Board of Commissioners of Mesa County is considering the construction of a steel bridge at Main St. Estimated cost, $50,000.

***Portland, Ore.**—Bids for constructing the superstructure of a bridge over the Willamette River on a western extension of Broadway, were received by the Mayor and Executive Board Dec. 1, as follows: Sound Construction Co., Strauss bascule, $903,168; Robert Wakefield & Co., Strauss bascule, $807,330; Strauss modified, $786,311; Strobel bascule, $763,979; Pennsylvania Steel Co., Steelton, Pa., Strauss, $700,353; Strauss alternative, $660,799; Strobel, $659,729; United States Steel Products Co., Rall bascule, $782,573; Strauss revised, $791,485; official Strauss, $826,100. Ralph Modjeski, Monadnock Block, Chicago, is Consult. Engr. Noted Oct. 19.

BUILDINGS.

(**Denotes that this work is advertised in Engineering News.*)

Boston, Mass.—A 31-apartment block will be constructed at Commonwealth Ave. and Lawton St. for Snider & Drooker, Journal Bldg. The estimated cost is $40,000. Plans were prepared by F. A. Norcross, Arch., 46 Cornhill St., Boston.

A Methodist Church will be constructed in the Fenway. The Rev. John Galbraith, Newton Upper Falls, is Pastor.

A club house will be constructed by the Harvard Club. A committee has been appointed with Robert F. Herrick as Chn.

Westfield, Mass.—A bank, store and office building will be constructed at Elm and Thomas Sts., for Hearn & Co., School St. C. A. Tinker, 43 Main St., is the Arch.

Springfield, Mass.—Bids are being received for the construction of a storehouse on Lyman St. for Henry J. Perkins Co. Thomas M. James, 15 Ashburton Pl., Boston, is Arch.

Andover, Mass.—Phillips Academy will construct an infirmary building on Main St. Plans have been prepared by Guy Lowell, Tremont Bldg., Arch.

Manchester, Mass.—The New England Telephone Co. will construct a telephone building on Summer St.

Somerville, Mass.—A building will be constructed by the West Somerville Congregation Church Society. Plans are being prepared by Prescott & Sidebottom.

Boston, Mass.—A plant, consisting of six or seven buildings, will be constructed by the Edison Electric & Illuminating Co., on Massachusetts Ave., Roxbury District. W. H. Atkins, 39 Boyleton St., is Gen. Mgr.

The Industrial Development Co., a company formed by members of the Chamber of Commerce, has raised the sum of $500,000 for the purpose of furnishing capital for new industries for Boston. James J. Starrow is Pres.

Malden, Mass.—The congregation of St. Paul's Episcopal Church will construct an edifice on Washington St. The cost is $40,000.

Boston, Mass.—A 25-apartment block will be constructed on Peterborough St. for Davis & Sherman, 536 Commonwealth Ave. Plans by Funk & Wilcox, 15 Beacon St.

Carver, Mass.—The Massachusetts Fish and Game Association plan the erection of a club house. George B. Clark, 79 Milk St., Boston, is Pres.

Nahant, Mass.—The following bids were received Dec. 7 for the construction of the Nahant Town Hall: Connors Brothers Co., $47,900; J. E. Locatello & Co., $53,044; William Crane, $55,355; Whiton & Haynes Co., $55,500; McGahey & O'Connor, $57,377; Louis D. Cadario & Sons, $57,378; Central Building Co., $57,425; C. A. Dodge & Co., $58,117; Tyson Construction Co., $58,900; J. T. Wilson & Son, $59,817; John W. Duff, $61,828; Woodbury & Leighton Co., $69,556. Andrews, Jaques & Rantoul, 50 Congress St., Boston, are the Archs.

Springfield, Mass.—The City Council has granted the petition of the Berkshire Street Ry. Co., to construct a warehouse on Pearl St.

Belchertown, Mass.—A sum of $75,000 has been bequeathed to this town for the erection of a building to be known as Lawrence Memorial Hall.

+Boston, Mass.—The contract for the masonry work for the iron and steel warehouse to be constructed on Fargo St. for the Brown-Wales Iron Co. has been awarded to C. A. DODGE & CO., Erie and Albany Sts., Cambridge. The general contract is held by the NATIONAL FIREPROOFING CO., 120 Franklin St. The cost will be about $175,000. A. H. Bowditch, 7 Water St., is the Arch.

+The contract for the foundation for a storage and dry house to be built on Medford St., Charlestown District, for the Palmer & Parker Co. has been awarded to the J. W. BISHOP CO., 683 Atlantic Ave. Francis W. Dean, Inc., 53 State St., are the Archs.

Springfield, Mass.—Estimates are being received for a 4-story brick block on Linden St. for Abraham Weinberg. It will be 62 × 70 ft. and trimmed with brownstone. Bruno Wozny, 373½ Main St., is Arch.

Providence, R. I.—The Common Council has adopted a resolution appropriating $50,000 for a public comfort station and shelter to be constructed over the river north of Market Sq.

+Westerly, R. I.—The following bids have been received for the erection of the court-house and town hall on Broad st. The bids were submitted on three sets of specifications, calling for (1) a building entirely of granite, (2) brick and granite, and (3) granite base with brick above: WILLIAM WILLIAMS, Providence, R. I., (1) $77,000, (2) $84,000, (3) $88,600 (awarded contract): Frank D. McKendall, Pravidence, R. I., (1) $90,000, (2) $100,225, (3) $105,500; P. E. Harding, Providence, R. I., (1) $84,502, (2) $99,925, (3) $110,563; William H. Hamlin & Co., Providence, R. I., (1) $84,511, (2) $91,119, (3) $100,395; Peck, Williams & Co., Norwich, Conn., (1) $85,728, (2) $86,328 (3) $126,328; Norcross Bros., Providence, R. I., (1) $78,600, (2) $87,000, (3) $101,700; Wilmarth-Mackillop, Inc., Pawtucket, R. I., (1) $79,938, (2) $87,868, (3) $94,663; Charles B. McGuire & Co., (1) $77,441, (2) $86,260, (3) $93,306; Isaac Sherman & Co., (1) $89,496, (2) $95,098, (3) $99,598; Fenton-Charnley Co., Norwich, Conn., (1) $95,222 (2) $104,222, (3) $105,498; J. C. Robinson & Co., New York, N. Y., (1) $86,492, (2) $92,892, (3) $99,892; R. A. Sherman's Sons Co., (1) $82,872, (2) $89,980, (3) $101,030; Woodbury & Leighton, Boston, Mass., (1) $83,900, (2) $90,900, (3) $97,300; E. K. Watson Co., (1) $86,603, (2) $93,734, (3) $104,125; Doyle & Murphy Co., Norwich, Conn., (1) $67,305, (2) $74,425, (3) $86,236; J. W. Bishop & Co., Providence, R. I., (1) $89,382, (2) $97,322, (3) $110,526; Connors Bros. Co., Lowell, Mass., (1) $66,400, (2) $79,000, (3) $86,400. The plans were drawn by William K. Walker & Son, 17 Custom House St., Providence. Noted Oct. 26.

South Norwalk, Conn.—A Carnegie library will be erected at Washington and Franklin Sts., to cost about $40,000. John H. Light is Pres. and W. A. Griffin is Secy. of the Bd. of Dir.

Buffalo, N. Y.—Plans are being prepared for a 3-story addition to the Nardin Academy on Cleveland Ave. near Delaware Ave. Miss M. Hendrick, 135 Cleveland Ave., is Supt.

An agreement has been reached between the Terminal Commission of Buffalo and the officials of the Delaware, Lackawanna & Western R. R. Co., William H. Truesdale, Pres., for the location of the Lackawanna Co.'s passenger station and lake terminal at the foot of Main St. The improvement will include a 3-story fireproof station building and train shed with elevated track structure and a concrete wharf 1,000 ft. in length.

New Rochelle, N. Y.—The Common Council has received the following bids for the construction of the proposed court-house: Wills & Marvin, 1170 Broadway, $65,789; Robert S. Pollock Co., 118 East 28th St., $66,677; Isaac A. Hopper Co., Inc., 231 West 125th St., $68,561; J. Kennedy, $68,480; Hugh Gelty, Inc., 359 West 26th St., $73,250; John H. Parker Co., 315 Fourth Ave., $68,975; Louis Weber Building Co., 1 Madison Ave., $77,800; F. T. Nesbit & Co., 116 Nassau St., $78,000; Lange Construction Co., $80,480; W. H. Fissell & Co., 1133 Broadway, $82,000; C. Walter Construction Co., $83,200; Amsterdam Building Co., 43 West 27th St., $70,237; Galgano & Co., New Rochelle, N. Y., $69,800; Frank J. New, New Rochelle, $79,000; J. F. New & Son, New Rochelle, $74,995; Peter E. Bartnett, New Rochelle, $66,985; Peter Doern, New Rochelle, $68,754; J. & A. Walter Co., New Rochelle, $80,165; Richard Staub, Mamaroneck, $76,045.

+Rochester, N. Y.—The general contract and masonry has been awarded to the A. FRIEDERICH & SONS CO., 106 Mill St., for the erection of a theatre and store building on Plymouth Ave. near Main St., by the Thompson-Tyler Co. Leon Lempert is Arch. Cost, $100,000.

Buffalo, N. Y.—The Lehigh Valley R. R. will construct a new passenger station on the site of the present one. J. W. Holcomb, Buffalo, is Superv.

+The following contracts have been awarded for rebuilding the Broadway Arsenal: WILLIAM F. FELTEN, masonry and carpentry, $63,989; C. F. ERNST'S SONS, stone, iron and steel, $58,765; RADEMACHER BROS., roofing, $10,548; BUFFALO ELECTRICAL CO., $7,500; and the McGEE CO., plumbing, $7,820.

Canandaigua, N. Y.—The Board of Supervisors has received from the State Board of Charities a recommendation that Ontario County build a new almshouse.

Ithaca, N. Y.—The Board of Supervisors of Tompkins County have voted to build a county tuberculosis hospital at Taughannock Falls, near Cayuga Lake.

New York, N. Y.—Plans have been completed by J. Graham Glover, Arch., 166 State St., for the construction of a 7-story brick and concrete cold storage warehouse at 105-107 Horatio St. for the estate of Eugene A. Hoffman, 258 Broadway. The cost will be about $65,000.

Plans are being prepared by Frank Straub, 18 East 42d St., for the construction of a 6-story non-fireproof tenement at Cannon and Rivington Sts. Abraham Michelson, Coyesville, N. J., is owner. The approximate cost is about $50,000.

The Riverside Drive Realty & Construction Co. will soon receive bids on the 12-story apartment house at Riverside Drive and 114th St. The cost is about $1,200,000. Plans by G. Ajello, 1 West 34th St.

Plans have been completed by Walter Huefeli, Arch., 17 Madison Ave., for the construction of a 12-story apartment house at Cathedral Parkway and Columbus Ave. The Old Lyceum Building Co., 60 Broadway, is the owner. The probable cost is $225,000.

+The general contract has been awarded to the THOMPSON-STARRETT CO. to erect an extension to the Hudson Terminal Buildings at 42-44 Cortland St. and 49-55 Dey St. The work will be finished by May 1. The cost will approximate $350,000. Clinton & Russel, 32 Nassau St., are the Archs.

Plans will soon be completed by George Fred Pelham, Arch., 507 Fifth Ave., for the construction of a 6-story apartment house at 121st St., east of Amsterdam Ave. Robt. Wallace, Sr., Broadway and 149th St., is the owner.

Bids are being received by Alexander Baylies, Arch., 33 Bible House, for the construction of a 6-story storage building at 136 to 140 Watts St. for Henry Krogen, 468 Greenwich St. The cost will be $40,000.

Plans are being prepared by Buchman & Fox, Archs., 11 East 59th St., for the 20-story office, store and loft building to be erected at Madison Ave. and 42d St. by a syndicate formed by Frederick Johnson, 165 Broadway.

It is reported that the Board of Estimate has granted an appropriation of $200,000 for the proposed improvements to the New York Aquarium. The entire cost will be about $700,000.

The Brooklyn Lodge No. 22, B. P. O. Elks, will construct a new home at 142 South Oxford St. The cost will be about $300,000.

New York, N. Y.—It is reported that the Episcopal Church authorities in New York have decided to construct a hall to accommodate the Episcopal general convention. The hall will contain an auditorium seating 1,500, several committee rooms, and a large dining room. The building will be located on the cathedral grounds fronting on Amsterdam Ave. and Cathedral Parkway.

West Hoboken, N. J.—Plans have been completed by N. Solwedel, West Hoboken, for three flats at Clinton Ave. and Monastery St. The cost will be about $40,000. F. Ecaubert, 18 Rose St., New York, is owner.

The Raphael A. Caphone Co., 447 Summit Ave., West Hoboken, will probably construct a 4-story brick apartment at Summit and Highpoint Aves.

Atlantic City, N. J.—The members of the Atlantic City Country Club, are reported to have approved plans for the construction of a club house.

Bayonne, N. J.—The west wing of the Hotel La Tounette, Bayonne, which was recently destroyed by fire, will be rebuilt. The work will commence as soon as insurance claims are adjusted.

Camden, N. J.—Bids will be received until Jan. 3 for erecting the 2-story brick and terra cotta Masonic Temple, 45 × 145 ft., at Camden. Plans by Heacock & Hokanson, Bailey Bldg., Philadelphia, Pa. Estimated cost, $65,000.

+Newark, N. J.—Mrs. Theresa Kraft has awarded a contract for the construction of a 16-family apartment house at Bigelow St. and Hillside Ave. to the CENTURY CONSTRUCTION CO. at $45,000. The building is to be four stories and to be constructed of red tapestry brick.

Pittsburgh, Pa.—A 4-story fireproof building will be constructed by James H. Matthews & Co. on a site recently purchased from the Nicola Land Co. at Forbes St.

Swarthmore, Pa.—A one-story auditorium, 94 × 105 ft., will be constructed by Swarthmore College. The building will cost $50,000, which is the gift of P. E. Sharpless. Joseph Swain is Pres.

Erie, Pa.—The Board of Water Commissioners has retained Armen Schlotteo, Engr., to prepare plans and specifications for a combined shop, residence and storage building of reinforced concrete, to be built at Twelfth and Myrtle Sts.

+Philadelphia, Pa.—The contract has been awarded to SAX & ABBOTT for the group of three cottages which will form the basis of the system of buildings for the Home for Feeble-Minded Women and Children at Torresdale. The cost will be $188,904. Two of the cottages will cost $70,968 each, and one $46,968.

Pittsburgh, Pa.—The University of Pittsburgh will construct a chapel on its campus. The cost will be about $150,000.

Philadelphia, Pa.—The Cape May Yacht Club is having plans prepared by Druckenmiller, Stackhouse & Williams for the construction of a clubhouse. The cost will be about $50,000.

Baltimore, Md.—Plans have been completed by Henry J. Tinley, Arch., Baltimore, for the construction of an apartment house on Roslyn Ave. for the Jeanette Apartment Co. The cost will be about $100,000.

Frostburg, Md.—Bids will be received by James Knox Taylor, Superv. Arch., Treasury Dept., Washington, D. C., until 3 p. m., Jan. 16, for the construction, complete (including plumbing, gas piping, heating apparatus, electric conduits and wiring, and lighting fixtures), of the U. S. post office at Frostburg. The building is one story, basement and unfinished attic, of approximately 3,100 sq. ft. ground area; fireproof construction, except roof; brick facing, with stone, marble and terra cotta trim and cornice; tile and copper roof. Drawings and specifications may be obtained from the Custodian of the site at Frostburg, Md., or at the office of the Supervising Architect.

Baltimore, Md.—Plans are being prepared by Samuel M. Bersterman, 36 North Potomac St., for the construction of 100 dwellings on Brice St. The cost will be about $130,000. Walter Westphall, 1700 North Bond St., is owner.

Virginia Beach, Va.—An auditorium will be constructed here by the Virginia Baptist Summer Encampment and chautauqua. The address of the organization is 601 Travelers Bldg.

Canton, Ohio.—The Canton Engineering & Electrical Co. has purchased a site at Third and Court Sts. and will construct a new building.

Norfolk, Va.—Construction work will soon be started by the Old Dominion Terminal Co. on its proposed terminal on South Ghent water front. The cost of the terminal will be about $2,000,000. It is estimated that the dredging will amount to 1,000,000 cu. yds. and will cost approximately ten cents a yard or $100,000.

Lynchburg, Va.—The students of Randolph-Macon Woman's College will probably erect a students' building, to cost $60,000.

Orangeburg, S. C.—Bids will be received at the office of Superv. Arch., Washington, D. C., until 3 p. m., Jan. 19, for the construction, complete, of a 1-story and basement building of approximately 3,750 sq. ft. ground area, brick faced, with stone and terra-cotta timming for the U. S. post office at Orangeburg, in accordance with drawings and specifications, copies of which may be obtained from the custodian of site at Orangeburg, or at the office of James Knox Taylor, Superv. Arch.

Jacksonville, Fla. — According to press reports the Seaboard Air Line will soon commence work on the proposed terminal improvement at the foot of Hovan St. The work includes two warehouses and other structures.

Union City, Tenn.—Bids were received as follows Dec. 5, by James Knox Taylor, Superv. Arch., U. S. Treasury Dept., Washington, D. C., for the construction of a U. S. post office at Union City: (a) limestone; (b) sandstone: Rogers & Kaiser, Chicago, Ill., (a) $42,472, (b) $46,472; George W. Stiles Construction Co., Chicago, Ill., (a) $39,885; David Getaz & Sons Co., Knoxville, Tenn., (a) $42,000; M. B. Stoddard, Staunton, Va., (a) $49,847, (b) $50,447; Newport Contracting & Engineering Co., Newport News, Va., (a) $46,145, (b) $47,945; Hiram Lloyd

Building & Construction Co., St. Louis, Mo., (a) $42,507, (b) $43,407; **King Lumber Co.**, Charlottesville, Va., (a) $45,000, (b) $48,000; **Algernon Blair, Montgomery**, Ala., (a) $41,900, (b) $43,950; Barnes Bros., Logansport, Ind., (a) $53,000; Globe Construction Co., St. Louis, Mo., (a) $42,868, (b) $44,300.

Louisville, Ky.—The Norton Building Co., which is erecting a building at Fourth and Market Sts., has changed its plans from the original and will put up a five, instead of a four-story structure of brick and steel. Cost will be about $55,000.

Paducah, Ky.—The First Baptist Church, Paducah, has raised $48,000 of $50,000 necessary for the construction of a new church building. Plans have not yet been prepared.

Newport, Ohio. — The Newport Turngemeinde will probably construct a gymnasium on the ground recently purchased at Sixth and Orchard Sts. A committee has been appointed.

Young, Ohio.—Plans have been filed for the erection of a commercial building on South Champion St., by Lee Guthman and John F. Cantwell. Cost, about $150,000.

✚Brunswick, Ohio.—The contract has been awarded to WALTER BONSON for the construction of an Odd Fellows Temple.

Marion, Ohio.—Bids will be received until Dec. 14 by James A. Knapp, Dir. Pub. Safety, for furnishing materials and performing the labor necessary to complete the new Central Fire Station at Marion. Plans, specifications and details are on file at the office of Gustave A. Niehus, Arch., Dayton, Ohio.

Perrysburg, Ohio.—Dr. I. S. Bowers and his son, Dr. Mevlin Bowers, St. Vincent's Hospital, have purchased a large dwelling on East Second St. and will remodel it into a hospital.

Youngstown, Ohio.—Plans have been filed for the erection of a commercial building in South Champion St. by Lee Guthman and John F. Cantwell. The cost is about $150,000.

Brazil, Ind.—Architects have submitted plans for the construction of a $200,000 court house for Clay County. Bids will be asked by the County Commissioners as soon as plans are selected.

Evansville, Ind.—The trustees of the local lodge of Elks will ask for bids for the erection of a lodge hall and business building as soon as plans have been selected.

Lafayette, Ind.—The trustees of Purdue University have ordered plans on which to ask for bids for the erection of a $50,000 dairy building on the agricultural farm here.

Marion, Ind.—The Marion Telephone Co., recently incorporated, announces that it will build an exchange building and automatic system in Marion. Samuel L. Strickler, David Brumenthal and Jerome Herff are Dirs.

Indianapolis, Ind.—The Security Trust Co. has leased a site on East Washington St. on which to erect a 10-story office building to cost about $100,000.

Detroit, Mich.—Plans will be prepared by A. W. Johnson, Spitzen Bldg., Toledo, for the construction of a theatre for the Eastern Theatrical Syndicate. The cost will be about $100,000.

Plans are being prepared by C. H. Crane, Ford Bldg., Detroit, for the construction of a 2-story theatre for Maurice Lynch, 1281 East Grand Boulevard. The probable cost is $50,000.

✚H. B. Stratton, Union Trust Bldg., Detroit, has awarded the masonry contract for the proposed parochial school at Grosse Pointe to H. S. BOCOCK, Rowland Bldg., Detroit.

✚Detroit, Mich.—W. B. Stratton, Union Trust Bldg., Detroit, has awarded the general contract for the proposed chapel and parsonage for the Protestant Society at Grosse Pointe to A. BELANGEN, 117 22d St., Detroit. The cost is $25,000.

South Haven, Mich.—The citizens of South Haven have decided to construct a school building. Architects have not yet been selected.

✚Detroit, Mich.—Pollman & Ropes, Cleland Bldg., have awarded a contract for a 2-story and basement stone building to PUTNAM & MOOSE, 733 Wabash Ave. A. Jacobs is owner.

Plans are being prepared by Zach Rice, 57 Fort St., for the construction of a residence in Grosse Pointe Farms, Gabriel Chiera, 550 Brush St., is owner. The cost is $75,000.

Chicago, Ill. — Three apartment houses will be constructed by John S. Holmes on the south side at an aggregate cost of about $300,000.

Chicago, Ill.—A 16-story office building will be constructed at 177-181 West Madison St. by the Schoenhofen Brewing Co. The cost will be about $400,000.

Chicago, Ill.—Two 48-apartment buildings will be constructed at Argyle St. near Southport Ave. Niels Buck is the owner. The cost is $300,000.

Peoria, Ill.—Plans and specifications are being prepared by Reeves & Baillie for the construction of an addition to the building of Joseph Szold & Son at Adams and Garden Sts. The cost will be about $45,000.

Milwaukee, Wis.—A chapel for the students at the University of Wisconsin will be erected by the members of the Methodist church throughout the state. The cost will be about $100,000.

✚Milwaukee, Wis.—John S. Metcalf Co., Chicago, has been retained by the Chicago & Northwestern Ry. Co. to prepare plans and specifications for a 500,000-bushel reinforced concrete storage house to be erected on the site of the old elevator "B," which burned in Milwaukee and to work in connection with the existing elevator "A."

Friendship, Wis.—The County Board of Supervisors has voted an appropriation of $50,000 for a new court-house. Plans are being received and a selection will be made Jan. 9, following which date bids will be received.

Madison, Wis.—The State Board of Control of Charitable and Penal Institutions has voted to purchase a 72-acre tract adjoining the state penitentiary at Waupun, Wis., for the proposed new state hospital for the criminal insane. The probable cost is $100,000. M. J. Tappins is Secy.

Racine, Wis.—Gilbert & Funston, Archs., are preparing plans for a 5-story clubhouse for the B. P. O. Elks. It will be 84 × 80 ft., of pressed brick and stone construction. The estimated cost is $40,000.

Washington, Iowa.—The Methodists of Washington will construct a church. The cost will be $60,000. The Rev. U. S. Smith is Rector.

Kansas City, Kan.—The Long Bros. Grocery Co. will construct a building at St. Louis and Santa Fe Aves. The probable cost will be $190,000.

✚Omaha, Neb.—The contract has been awarded to the PAULI JAIL BUILDING CO. at $50,000 for the construction of a jail.

✚Huron, S. Dak.—James Knox Taylor, Superv. Arch., Treasury Dept., Washington, D. C., has awarded a contract for the construction of a U. S. post office at Huron, to the NORTHERN CONSTRUCTION CO., Milwaukee, Wis., at $95,833.

✚St. Louis, Mo.—Work will soon be started by the WEST LAKE CONSTRUCTION CO., on the 21-story Railway Exchange office building, to be erected on the site of the Barr Block. The contract calls for an expenditure of $3,500,000 on the building proper and of $500,000 for the power plant to be located at Sixth and St. Charles St. A tunnel will be built under Locust St. to connect the power plant with the main building.

A permit has been granted to the Regal Shoe Co. to construct a 5-story building of reinforced concrete at Sixth St. and Washington Ave.

John T. Milliken & Co., chemists, have purchased a site for a new laboratory at North Market St. and Leffingwell Ave., and will construct a plant which will cost about $100,000.

St. Louis, Mo.—An auditorium will be constructed by the Pilgrim Evangelical Lutheran Congregation. The cost will be about $50,000.

Work will soon commence on the proposed stone church to be constructed by the Grace Evangelical Lutheran Congregation at St. Louis and Garrison Aves. The cost will be about $100,000.

Little Rock, Ark.—The County Court has appropriated $50,000 to build a court house. J. W. Hardy, Higden, Ark., and J. R. Baker, Heber Springs, Ark., were appointed as a commission for that purpose. The Commission has retained Clyde A. Ferrell, Little Rock, Ark., to draw plans and specifications for the building, and to otherwise superintend the construction of the work. Plans and specifications for the work may be seen at the office of the engineer, at Little Rock, or at the office of the Commission at Heber Springs, after Dec. 15. It is the purpose of the Commission to advertise for bids on the work about Jan. 1.

Temple, Tex.—Work will soon begin on the proposed $40,000 annex to the Kings Daughters' Hospital. The proposed annex will contain 35 rooms; it will be three stories high, with basement, and will be fireproof throughout.

Denver, Colo.—Plans for the addition to the Albany annex are about complete. The building, which will be located on Stout St., will cost about $250,000.

✚Clifton, Ariz.—The contract has been awarded to O. P. KROEGER, Arch., El Paso, Tex., for the construction of a 2-story brick court-house and jail. Cost, will be about $43,000.

✚Phoenix, Ariz.—A contract has been awarded to G. H. GALLAGHER for rebuilding the asylum building recently destroyed by fire. The cost will be about $60,000.

Phoenix, Ariz.—Royal W. Lescher has been commissioned to prepare plans for a 5-story reinforced concrete building for Charles Konick. The cost will be about $100,000.

Yuma, Ariz.—The American Centrifugal Concrete Co. has been incorporated here with a capital stock of $100,000. The directors are P. Manx Kauehnrich, Louis Blackmanhorn, Lawrence Macomber.

Salt Lake City, Utah.—The State Board of Schoolhouse Commissioners have approved plans and specifications for two new high schools to be constructed here. The cost will be about $50,000.

Tacoma, Wash. — The Puget Sound Electric Ry. will construct a passenger station at Eighth St. The structure will be four stories.

Seattle, Wash.—A site has been purchased at Yanshell and Seventh Aves., by Sullivan & Considine, on which an office and theatre building will be constructed. The cost will be about $250,000.

Walla Walla, Wash.—Bids will be received by James Knox Taylor, Superv. Arch., Treasury Dept., Washington, D. C., until 3 p. m., Jan. 18, for the construction of a brick-faced building of approximately 10,750 sq. ft. ground area, two stories and basement, of none-fireproof construction, including plumbing, heating apparatus, gas piping, electric conduits and wiring, and interior lighting fixtures, for the U. S. post office and courthouse at Walla Walla, Wash. Drawings and specifications may be obtained from the custodian of site at Walla Walla, Wash., or at the office of the Supervising Architect.

Portland, Ore.—Plans have been completed for the construction of a public market in Portland. The cost will be about $400,000.

Albany, Ore.—Bids were received as follows Dec. 7 by James Knox Taylor, Superv. Arch., Treasury Dept., Washington, D. C., for the construction of a U. S. post office at Albany, (a) limestone, (b) sandstone: J. H. Wiese, South Omaha, Neb., (a) $62,393; Welch Bros., Portland, Ore., (a) $74,685, (b) $72,183; Palmberg & Mattson, Astoria, Ore., (a) $75,586, (b) $73,586.

Huntington Park, Cal.—W. J. Bleisner, Arch., Laughlin Bldg., has been commissioned to prepare plans and specifications for the high school building, to be constructed in Huntington Park. It will be fireproof construction and will probably cost from $75,000 to $100,000.

✚Oakland, Cal.—J. M. Locke has awarded the contract to P. J. WALKER CO., Monadnock Bldg., San Francisco, for the construction of a concrete store building on 14th St. Estimated cost, $60,000.

Los Angeles, Cal.—H. M. Patterson, Arch., O. T. Johnson Bldg., has been commissioned to prepare plans and specifications for a 2-story brick school building for Spanish girls to be erected at Evergreen and Clinton Sts., Boyle Heights, for the Presbyterian National Board of Home Missions. Estimated cost, $35,000.

Bids will be received until 2 p. m., Dec. 14, by the Board of Education, Security Bldg., for the erection of a 2-story and basement 9-room grammar school building at Western Ave. and 53d St. The cost will be about $50,000. George F. Costerisan, Henne Bldg., is Arch.

San Francisco, Cal.—A permit has been granted to Josephine Dupuy for the erection of a 5-story brick hotel building at Mission and Seventh Sts. The cost will be about $78,559.

Winnipeg, Man.—A new legislative building will be constructed on the site of the Fort Osborne Barracks. The cost will be about $200,000. Architects have not yet been selected.

Port Colborne, Ont.—The Maple Leaf Milling Co. plans to erect 20 houses for its employes next spring.

WATER SUPPLY—IRRIGATION.

(✚*Denotes a contract awarded.*)

Rochester, N. Y.—Plans are being prepared by Edwin A. Fisher, City Engr., for connecting Canadice and Hemlock Lakes, to provide for the time when Hemlock Lake, the city's source of water supply shall prove inadequate.

Mount Morris, N. Y.—The taxpayers have voted against the proposition to spend $95,990 for the installation of a municipal water-works system.

***Wilmington, Del.**—The date for receiving bids for furnishing a pump to the city has been changed from Dec. 11 to Dec. 18. John A. Kienle is Ch. Engr. Bd. Water Comrs.

Baltimore, Md.—The Water Board has approved plans and specifications prepared by Ezra B. Whitman, 2432 North Charles St., Baltimore, for the construction of a dam in Gunpowder River, at Loch Raven. The plans call for a dam 186 ft. high, capable of creating a reservoir with a capacity of 2,000,000,000 gallons. Contract will probably be awarded before Jan. 1. Estimated cost, $500,000. Alfred M. Quick is Supt. W.-Wks. Noted Nov. 30.

***Cumberland, Md.**—We are officially advised that bids were received as follows Dec. 1 by the Evitts Creek Water Co. and the Mayor and City Council for the new water system for the city: Merrill-Ruckgaber Co., 50 Church St., New York, $465,268; Vang Construction Co., Cumberland, $518,428; H. C. Brooks Co., Clarksburg, W. V., $521,049; James Westwater Co., Columbus, Ohio, $586,191; Winston & Co., New York, $831,000. Noted Feb. 9.

✚Washington, D. C.—The District Commissioners have awarded the contract to the LYNCHBURG FOUNDRY CO., Lynchburg, Va., for furnishing about 1,207 tons of 8-in. c.-i. water pipe at $23 per ton. Bids were opened Nov. 27. List of bidders noted Dec. 7.

***Charlotte, N. C.—We are officially advised that all bids opened Dec. 7 for constructing a pumping station and intake were rejected. New bids will be received by the Board of Water Commissioners, until 8 p. m., Dec. 19. Plans and specifications are on file at the office of Gilbert C. White, Consult. Engr., Charlotte and Durham, N. C.**

Charlotte, N. C.—The city has purchased land 4½ miles from the city line as a site for a 35,000,000-gal. reservoir. This proposed work is in connection with the extension of the water system to the Catawba River. Gilbert C. White, Charlotte and Durham, N. C., is Engr.

Bainbridge, Ga.—The city is considering an issue of $10,000 of bonds for the installation of a water-works system.

McDonough, Ga.—The town is considering issuing $22,000 of bonds for the installation of a water-works system.

Passagrille, Fla.—The town has decided to install a water-works system. W. W. Lyons, Jacksonville, Fla., is Consult Engr.

***Tallahassee, Fla.**—Bids will be received by the Board of Public Works until 7.30 p. m., Dec. 28, for furnishing f. o. b. cars at Tallahassee about 96 tons of 4, 6 and 8-in. c.-i. water pipe, either bell and spigot or Universal, and six tons of fittings. C. H. Ellis is Engr.

Gadsden, Ala.—The city is considering the installation of water meters.

Edwards, Miss.—The town is considering issuing $6,000 of bonds for drilling a deep water well. W. M. Robb is Town Clk.

✚Clarksville, Tenn.—We are officially advised that bids were received as follows Dec. 4 by the city for the construction of reinforced concrete sedimentation basins, clear-water reservoir, filter tanks, and pumping station: CLARENDON CONSTRUCTION CO., Wilmington, N. C., $20,198 (awarded contract); Cook Construction Co., Des Moines, Iowa, $20,820; A. J. Wardrep, Americus, Ga., $20,860; Meacham Contracting Co., Hopkinsville, Ky., $23,900; Pitt Construction Co., Pittsburgh, Pa., $25,000; J. A. Ornberg, Sr., Memphis, Tenn., $26,350; U. S. Construction Co., Columbus, Ohio, $26,900; H. J. Bosler, Chattanooga, Tenn., $32,550.

Lexington, Ky.—The Lexington Water-Works Co., Lexington, will install a settling basin and raise the dam at its reservoir. Plans, etc., may be seen at the office of the company.

Cleveland, Ohio.—Bids will be received by A. B. Lea, Dir. Pub. Ser., until Dec. 18, for steam piping and auxiliaries for the Kirkland pumping station.

Cleveland, Ohio.—Bids were opened Dec. 6 by the Water Department for the West Side water tunnel. The lowest bid was submitted by the Reaugh Construction Co., Cleveland, at $919,152. On a previous call for bids opened Oct. 31 the lowest bid submitted was $966,655. Noted Nov. 16.

Niles, Ohio.—F. C. Brewer, City Engr., is preparing plans for water-works extensions.

Youngstown, Ohio.—Frank M Lillie, City Engr., is preparing plans for the construction of a reservoir. Estimated cost, $300,000.

Newcastle, Ind.—All bids opened by the City Clerk for improvements to the water system have been rejected. New bids will not be asked until next spring. Noted Nov. 23.

Chicago, Ill.—We are officially advised that bids for furnishing three pumps and engines at Lake View Pumping Station were received Dec. 2, as follows: Nordberg Mfg. Co., Milwaukee, $272,200; Bethlehem Steel Co., Bethlehem, Pa., $292,000; Hoover, Owens, Rentschler Co., Hamilton, Ohio, $318,000; Fulton Iron Works, St. Louis, $348,900; Holly Mfg. Co., $349,769; William Tod Co., $367,000; Allis-Chalmers Co., $364,000. Noted Nov. 30.

✚Jerseyville, Ill.—The contract for laying a watermain in South Lafayette St. and Andrew Ave. has been awarded to HEIRSCH & MICOTTO, St. Louis, Mo., at 75 cts. per ft. for 6-in., and 60 cts. per ft. for 4-in. pipe.

✚Rushville, Ill.—Bids were received as follows Dec. 4 by the city for the construction of the water-works system: Cook Construction Co., Des Moines, Iowa, $30,948; DES MOINES BRIDGE & IRON CO., Des Moines, Iowa, $30,986 (awarded contract); Edwin T. Sykes, Minneapolis, Minn., $31,890; Ora T. Dunlop, Edwardsville, Ill., $35,150; Monahan & Co., St. Louis, Mo., $36,477.

✚Evanston, Ill.—The Board of Local Improvements has awarded the contract for laying water mains here to C. T. BARTLETT, Evanston.

Normal, Ill.—Bids will be received by the City Clerk until 4.30 p. m., Dec. 20 for laying water mains in Cherry St. Melluish & Broyhill, Bloomington, Ill., are Engrs.

Fox Lake, Wis.—The citizens voted Nov. 28 to issue $20,000 of bonds for the installation of a water-works system. Oscar Claussen, German-American Bank Bldg., St. Paul, Minn., is Engr. Noted Nov. 16.

Owen, Wis.—The town has engaged W. G. Kirchoffer, Consult. Engr., Madison, Wis., to prepare plans and specifications for the installation of water-works and the extension of the sewer system.

Fond du Lac, Wis.—See item under **Light, Heat and Power Plants.**

***Dubuque, Iowa.**—Bids will be received by the Board of Water Trustees until 8 p. m., Jan. 22, for the construction, delivery and erection of a 2,000,000-gal. duplex, double-acting motor-driven pump at the Level Pumping Station. B. F. Stedman is Supt. R. P. Melendy is Engr.

West Union, Iowa.—Bonds for $10,000 for the construction of water-works will be issued by the city.

✚Keewatin, Minn.—The city has awarded a contract to MOE BROS., Virginia, Minn., for sinking a well.

Wellington, Kan.—The towns of Wellington, Oxford and Belle Plaine are considering the construction of one water-works plant for a joint supply.

Tecumseh, Neb.—Bids will be received until Dec. 18 by the City for the improvement of the water service by constructing a new concrete reservoir and sewer mains. Estimated cost, about $29,500.

Bowdle, S. Dak.—Prelinminary plans have been prepared for the installation of a municipal water-works system. Estimated cost, $13,600.

Mobridge, S. Dak.—Bids will be received until 8 p.m., Dec. 18, by M. T. Woods, City Audr., for furnishing a pump of 825 gals. capacity per min., and 6-in. pipe for connection.

Cody, Wyo.—We are officially advised that Burns & McDonnell, Consult. Engrs., Scarritt Bldg., Kansas City, Mo., are preparing plans for a new water supply and water-works improvements here. Estimated cost, $15,000. Noted Nov. 9.

Grandview, Mo.—Plans have been completed by Charles E. Johnston, Consult. Engr., Thayer Bldg., Kansas City, Mo., for a storage reservoir and treating plant of 200,000 gals. capacity at Grandview for the Kansas City Southern R. R. Co.

McAlester, Okla.—The city is considering laying an additional 8-in. pipe line from the city reservoir to Gaines Creek to increase the water supply. H. F. Schreiner is Supt. Pub. Wks.

✚Montrose, Colo.—The Secretary of the Interior has awarded the contract for constructing six miles of canal east of the Uncompahgre Valley Irrigation Project, Colo., to the SAYLER CONSTRUCTION CO., Lamar, Colo., at $18,060.

✚Boulder, Colo.—The contract has been awarded to C. C. GROSS, Boulder, by the Laramie-Poudre Irrigation Co. for lining about 1,457 lin. ft. of irrigation tunnel with concrete, at $6.75 per lin. ft.

Winnemucca, Nev.—We are officially advised that Burns & McDonnell, Consult. Engrs., Scarritt Bldg., Kansas City, Mo., are preparing plans for the construction of water-works here. A valuation of the privately owned water and lighting plant is now being made.

Grantsville, Utah.—The South Willow Irrigation Co., Grantsville, is considering the construction of a steel pipe line about eight miles long. O. H. Barris is Secy.

Preston, Idaho.—The citizens voted Dec. 1 in favor of issuing $75,000 of bonds for the installation of a municipal water plant.

Ilo (Vollmer post-office), **Idaho.**—The town is having plans prepared for the installation of a water-works system. Estimated cost, $11,000.

Boise, Idaho.—We are officially advised that bids were received as follows Dec. 1 by the U. S. Reclamation Service, Boise, for drag-line excavators: F. C. Austin, Drainage Excavator Co., three bids, $11,250, $14,250 and $7,000 f. o. b., Chicago; H. Channon Co., Chicago, $16,550 f. o. b. Chicago; Lidgerwood Mfg. Co., Chicago, $8,200 f. o. b. Chicago; Bucyrus Co., South Milwaukee, Wis., four bids, $12,500, $12,440, $12,500 and $12,000, three first f. o. b. South Milwaukee and the fourth f. o. b. Duluth, Minn.; Clyde Iron Works, Chicago, two bids, $9,500 and $5,700, f. o. b. Duluth and Kuna, Idaho respectively; Hoy & Elzy Co., St. Paul, Minn., $4,200, f. o. b. Kuna, Idaho; Prest. Md. D. & C. Co., Baltimore, Md., $12,000 f. o. b. Utica, N. Y. The bids are based on various types and horsepower capacities.

Spokane, Wash.—Plans will be prepared by Alexander Lindsay, Supt. W.-Wks., for the construction of the North Hill supply mains. Estimated cost, $100,000.

Elma, Wash.—The town has rejected all bids opened Dec. 5 for furnishing the material and constructing a water-works system and pumping plant. L. C. Kelsey, Selling Bldg., Portland, Ore., is Consult Engr. Noted Aug. 24, Oct. 19, and Nov. 16.

Seattle, Wash.—The city is considering an appropriation of $15,000 for repairs to the Cedar River water supply system. R. H. Thomson is City Engr.

Stevenson, Wash.—The town is considering the purchase of the water system of the Stevenson Water & Improvement Co.

Canyon City, Ore.—The city is considering the installation of new distribution mains. Estimated cost, $6,000.

Madras, Ore.—The town has voted in favor of issuing $10,000 of bonds for the installation of a water-works system. Incorrectly noted as Madras, Cal., last week.

Redmond, Ore.—The City Council is considering the installation of a gravity water system. Estimated cost, $29,000.

Sutherlin, Ore.—We are officially advised that the city is considering the installation of a gravity water system from drilled wells. Estimated cost, $20,000. Sidney Strang, Sutherlin, is Engr. Noted Nov. 16.

✚El Centro, Cal.—Bids were received Nov. 20 by W. H. Sprague, City Clk., for furnishing and laying cement pipe specials, etc. We are officially advised that the contract has been awarded to the IMPERIAL VALLEY CEMENT CO.

San Diego, Cal.—The water Department will erect a tower and tank in University Heights. H. R. Fay is Supt. W.-Wks.

Santa Monica, Cal.—George W. Harding, Consult Engr., Citizen's National Bank Bldg., Los Angeles, Cal., is preparing plans and specifications for the construction of two reinforced concrete reservoirs of 1,000,000 and 500,000 gals. capacity, respectively.

Winnipeg, Man.—Bids will received by M. Peterson, Secy. Bd. of Control, until 11 a. m., Dec. 18, for furnishing c.-i. water pipe, gate valves and hydrants.

Bids will be received by M. Peterson, Secy. Bd. of Control, until 11 a. m., Dec. 29, for the delivery and erection of a 1,000,000-gal. (Imperial) centrifugal vertical pump.

SEWERAGE.

(**Denotes that this work is advertised in Engineering News.*)

Newport, R. I.—Bids will be received until 11 a. m., Jan. 6, by the Bureau of Yards and Docks, Navy Dept., Washington, for constructing a sewer and outfall at the U. S. Naval Hospital, Newport. Plans and specifications can be obtained on application to the Bureau or to the Commandant of the Naval Station, Narragansett Bay, Newport, R. C. Hollyday is Ch. of Bureau.

✚Bridgeport, Conn.—The contract for the first section of the Brooklawn sanitary trunk sewer has been awarded to STREULI & PUCKHAFER, Bridgeport, at $4.35 per lin. ft. for 30-in. and $2.69 for 24-in. reinforced-concrete sewer. The other bids received on 30-in. sewer were as follows: O'Neil Bros., $7.90; Pierce Mfg. Co., $6.63; B. D. Pierce, Jr., Co., $6.50; Burns Co., $6.40; Toole & Sunderlin, $5.70. Noted Nov. 30.

✚Waterbury, Conn.—The following bids were received by the Board of Public Works Dec. 5, for the construction of sewers in South Leonard and Webb Sts., Tower Road and Euclid and Randolph Aves.: JOHN F. KEATING, Waterbury, Conn. (awarded contract), (a) special drop manholes, $2.15 each; (b) ordinary manholes, $55 each; (c) 2,323 ft. of 8-in. pipe, $1.04 per ft.; (d) 790 ft. of 9-in. pipe, $1.12 per ft.; (e) 116 ft. of 10-in. pipe, $1.35 per ft.; (f) 846 ft. of 15-in. pipe, $2.98 per ft.; (g) total, $8,824; Pierson Engineering & Construction Co., Bristol, Conn., (a) $245, (b) $48, (c) $1.10, (d) $1.07, (e) $1.57, (f) $3.20, (g) $9.205; Antonio Conti, Hartford, Conn., (a) $190, (b) $60, (c) $1.15, (d) $1.75, (e) $1.50, (f) $4.50, (g) $9.372; Frank D'Aurio, Waterbury, Conn., (a) $135, (b) $66, (c) 85 cts., (d) 93 cts., (e) $1.50, (f) $5.35, (g) $10,541; Antonio Lambo, Waterbury, Conn., (a) $145, (b) $50, (c) $1.05, (d) $1.17, (e) $1.17, (f) $6.40, (g) $11,403; Henry Spinach Construction Co., Waterbury, Conn., (a) $150, (b) $55, (c) $1.17, (d) $1.20, (e) $1.35, (f) $6.00, (g) $11,743. Noted Nov. 30.

Buffalo, N. Y.—The City Council has ordered the construction of tile sewers in Washington St., Montrose, Homeworth, Devereaux and Wecker Aves., and Meadowview Pl. Francis G. Ward is Comr. Pub. Wks.

Buffalo, N. Y.—The lowest bid received for the construction of a 36, 33 and 30-in. brick, 20, 15, 12 and 10-in. tile sewer in Montrose Ave. and other streets, was submitted by Jos. F. Stabell Co., Buffalo, at $11,809.

Glen Cove (L. I.), N. Y.—A 20-mile sewer system will be built in Glen Cove. Commissioners have been appointed as follows: F. L. Hine, Pres. First National Bank of New York, Chn.; R. Frank Bowne, Treas.; Edward J. Deasy, Secy. A $150,000 bond has been given. William H. Bowne, Glen Cove, is Engr.

Newburgh, N. Y.—Bids for constructing a sewer in First St., between Prospect St. and Fullerton Ave., have been received by the City Council as follows: (a) 15-in. sewer, per lin. ft.; (b) rock excavation, per cu. yd.; (c) extra concrete, per cu. yd.: M. R. Spino, Fishkill, (a) $2.59, (b) $3.99, (c) $6.25; Jova & Kehoe, Newburgh, (a) $1.62, (b) $3.00, (c) $6.00; Abner M. Harper, Newburgh, (a) $1.75, (b) $3.50, (c) $5.00; Murphy & Gorman, Newburgh, (a) $1.47, (b) $1.59, (c) $7.00; James T. Smith, Newburgh, (a) $1.60, (b) $1.50.

✚New York, N. Y.—We are officially advised that the contract for constructing a sewer in 117th St., from the Harlem River to Pleasant Ave., was awarded Nov. 27 by George McAneny, Pres. Boro. Manhattan, to TERRANCE A. SMITH, 255 Court St., Brooklyn, N. Y., at $6,311.

New York, N. Y.—Bids will be received until 11 a. m., Dec. 20, by Alfred E. Steers, Pres. Boro. Brooklyn, for constructing sewers in various streets. Approximate cost, $24,000.

Oswego, N. Y.—A bond issue of $190,000, the proceeds to be used for the construction of trunk sewers on each side of the river, is contemplated.

***White Plains, N. Y.**—Bids will be received until Dec. 30 by the Bronx Valley Sewer Commission, Frank J. Hoyle, White Plains, Chn., for extending the outlet of the Bronx Valley trunk sewer farther out in the Hudson River at Yonkers. Estimated cost, $70,000. Noted Nov. 30. For details see advertisement in this issue.

Phillipsburg, N. J.—Bids will be received until 2 p. m., Dec. 20, by the Chairman of the Sewer Commission for the construction of a sewer in Thomas St.

✚York, Pa.—Bids for sewer construction have been received by the City Highway Committee as follows: Thomas Wolf, 36-in. brick sewer, $4.60 per lin. ft.; 42-in., $5.35; 12-in. terra cotta pipe, $1.05; rock excavation, $3.50 per cu. yd.; manholes, $25 each; inlets, $24. A. B. KRAFT, York, 36-in. brick sewer, $4.42; 42-in., $4.74; 12-in. terra cotta pipe, 86 cts.; rock, $3.61; manholes, $35; inlets, $30 (awarded contract).

Norfolk, Va.—We are officially advised that Arthur C. Freeman, Consult. Engr., Norfolk, is preparing plans for a sewer system for Lochhaven, a suburb of Norfolk. The system will cover about 4½ miles. Bids for constructing one section will be asked at once.

✚Richmond, Va.—A contract for constructing about 5,000 ft. of from 5½ to 10-ft. sewer, has been awarded to A. W. MAYNARD & CO., Richmond, at $32,980.

Unadilla, Ga.—Bids will be received until 3 p. m., Dec. 20, by the Mayor and Council of Unadilla for constructing a sanitary sewer system, to include five miles of sewers, 1½ miles of 6 and 8-in. water main with appurtenances, brick building, reinforced-concrete reservoir, 80-HP. boiler, pumping engine and air lift. Specifications and plans are on file at the office of the Mayor, Unadilla. Specifications covering material land work may be obtained from the J. B. McCrary Co., Engrs., Atlanta, Ga.

Union Springs, Ala.—Bids will be received until Jan. 4 by the city for constructing sanitary sewers and a purification plant. Estimated cost, $30,000. Willburn Hill, Attalla, Ala., is Consult. and Design. Engr. P. L. Cowen is City Clk. Noted Dec. 7.

Fostoria, Ohio.—Bids will be received by the Director of Public Service until noon, Dec. 28, for construction of sewers in Sewer District No. 1 and in various other streets, according to plans and specifications on file at the office of the Director. J. T. Yant is Clk.

✚Akron, Ohio.—A contract for constructing a storm sewer from the Little Cuyahoga River to Vesper St. has been awarded to JAMES J. HUNT, Akron, at $9,897.

Cincinnati, Ohio.—Bids will be received until noon, Dec. 21, by the Director of Public Service, John J. Wenner, Clk., for constructing main and lateral sewers with appurtenances, in Knox St. and Blaine Road. Plans, specifications and blank proposals may be obtained at the office of the Chief Engineer of the Department of Public Service.

Lorain, Ohio.—Bids will be received until noon, Dec. 21, by the Director of Public Service, for constructing a sanitary sewer in West 21st St., from Oberlin to Washington Ave., and a storm sewer in Clinton Ave., from East 31st St. to East 34th St. L. B. Johnston is Clk.

Gary, Ind.—Arthur Mellon, Consult. Engr., has been retained by the city to prepare plans for the Ridge Road District sewer system. Estimated cost, $150,000.

✚Peru, Ind.—The contract for constructing sewers in Chestnut St. has been awarded to M. BURKE, Peru, at $18,000. Noted Nov. 23.

✚Belleville, Ill.—The contract for constructing the McKenzie Place District sewer has been awarded by the Board of Public Improvements to HOEFFHEN BROS., Belleville, at $34,756. The other bids were: Reeb Bros., $37,568; H. C. Cass, $37,986.

Rockford, Ill.—Plans are being prepared by the City Engineer, for a sewer system in the northern section of the city. Estimated cost, $40,000.

West Allis, Wis.—The Common Council is considering the construction of a concrete storm sewer on Mitchell St. Estimated cost, $18,000.

Owen, Wis.—See item under Water Supply—Irrigation.

Stillwater, Minn.—A sanitary sewer, with an outlet to the St. Croix River, will be laid in South Second St. L. W. Clarke is City Engr.

✚Oswego, Kan.—We are officially advised that the contract for constructing two miles of 8 to 10-in. pipe sewers in District B was awarded Dec. 5 to J. W. KELSO, Oswego, at $11,050. M. A. Earl & Co., Muskogee, Okla., are Consult. Engrs. Noted Nov. 30.

✚Mobridge, S. Dak.—A contract for sewer construction has been awarded to the MOBRIDGE CONSTRUCTION CO. at $9,780.

St. Louis, Mo.—Bids will be received until noon, Dec. 15, by the Board of Public Improvements, for constructing sewers as follows: 1,350 ft. of 24-in., 834 ft. of 21-in., 2,786 ft. of 18-in., 1,442 ft. of 15-in., 5,185 ft. of 12-in. and 415 ft. of 6-in. inside diameter pipe sewer. Dwight F. Davis is Pres. pro tem, and William I. Findlay is Secy.

Sedalia, Mo.—We are officially advised that bids will be received about May 1 for constructing concrete, brick and tile storm and sanitary sewers, and a disposal plant. Estimated cost, from $75,000 to $100,000. F. T. Leaming is City Engr., and C. E. Baker, City Clk. Noted Nov. 30.

Waco, Tex.—Bids will be received until Jan. 2, by the city for laying a sanitary sewer. The appropriation available is $45,000. Stephen Turner is City Engr.

Celina, Tex.—Bonds for $8,000 have been voted for sewer construction.

Clarksville, Tex.—Bonds for $25,000 have been voted for the construction of a sewer system. John R. Webb is City Clk.

Muskogee, Okla.—Bids will be received until 10 a. m., Dec. 19, by Charles Wheeler, Jr., City Clk., for constructing brick and 2-in. vitrified tile pipe sewers in Sanitary Sewer District No. 74. Plans and specifications are on file at the office of I. B. Clonts, City Engr.

Fallon, Nev.—Bids will be received until 7.30 p. m., Jan. 6, by the City Council for constructing a complete sewer system. The system will consist of 6,000 lin. ft. of 6 to 12-in. vitrified clay or cement sewer pipe, 6,000 lin. ft. of trenching, hauling and laying sewer pipe, construction of manholes, flush tanks, inspection of pipes, filling trenches; one Imhoff sewage tank and alternative bid for sewage tank according to design and specifications of bidder. W. H. Reavis is Clk.

North Yakima, Wash.—Bids will be received until 10 a. m., Dec. 18, by the city for constructing sewers according to plans and specifications prepared by the City Engr.

Enterprise, Ore.—The City Council is considering the construction of a sewer system. C. T. Darley is Engr.

Sebastopol, Cal.—Specifications have been approved and bids ordered for constructing sewers in Elinor and Walker Aves.

GARBAGE DISPOSAL.

(*✚Denotes a contract awarded.*)

Boston, Mass.—The following bids were received by the Public Works Department Dec. 5 for the disposal of refuse from July 1, 1912, to July 1, 1922. Figures are for each full year excepting the first and last, which are for the half year. The bids follow: Daniel P. Sullivan, $219,900, $225,398, $231,032, $236,808, $242,728, $248,797, $255,017, $261,392, $267,927, $274,625, $281,491; total, $2,745,114; J. P. O'Riorden, $256,000, $263,000, $268,000, $275,000, $283,000, $290,000, $297,000, $304,000, $312,000, $160,000; total, $2,832,000; Boston Development & Sanitary Co., 161 Devonshire St., Boston, $64,000, $131,000, $134,000, $137,000, $140,000, $143,000, $146,000, $149,000, $152,000, $156,000, $80,000; total, $1,432,000; Boston Disposal Co., Globe Bldg., Boston, $73,866, $147,060, $146,388, $145,718, $145,046, $144,374, $143,702, $143,030, $142,359, $141,687, $70,508; total, $1,443,738. Louis K. Rourke is Comr. Pub. Wks.

Philadelphia, Pa.—Bids were received Nov. 27 by Harry A. Mackey, Dir. Pub. Ser., as follows: For Schedule A, cleaning streets, alleys, inlets, public market houses, and for the removal of ashes, household waste and rubbish during the year 1912: First District, South Philadelphia, south of South St., between the Delaware and Schuylkill Rivers, Edwin H. Vare, $170,999; Second District, between South and Poplar Sts. and the Delaware and Schuylkill Rivers, same, $334,000; Third District, between Poplar St. and Lehigh Ave. and Broad St. and Delaware River, James D. Dorney (including trolley service), $312,000; same (alternate without such service), $183,333; Fourth District, between Lehigh Ave. and county line and Broad St. and Delaware River, James Curran, $172,000; Richard P. Bennis, $190,000; Fifth District, between Poplar St. and Lehigh Ave. and Broad St. and Schuylkill River, Peoples Bros., $184,000; H. A. McCleeman & Bro., $239,999; Sixth District, between Lehigh Ave. and county line and Broad St. to Schuylkill River, H. A. McCleeman & Bros., $139,900; David McMahon, $159,400; James Curran, $180,000; Seventh District, between Market St. and north county line and Schuylkill River, and west county line, Michael McNulty, $149,000; American Paving & Construction Co., $159,900; Peoples Bros., $170,000; Cunningham Paving & Construction Co., $185,000; Eighth District, between Market St. and south county line and Schuylkill River and west county line, James Irwin (including central dump and trolley removal service), $119,000.

Indianapolis, Ind.—Bids were received as follows Dec. 6 by the Board of Public Works for the removel and disposal of garbage and refuse for a term of six years: Jesse T. Moorman, Winchester, Ind., $48,000 per year; Gemmer & Henry, Indianapolis

$62,000 per year; Sylvester Johnson. Jr., Indianapolis, $54,900 per year; Indianapolis Reduction Co., Indianapolis, $55,000 per year. No bids were submitted for a 1-year term.

Aurora, Ill.—Bids have been received as follows by the city for constructing a garbage crematory with a capacity of 30 tons per 24 hrs.: Dixon Engineering & Construction Co., $16,374; Morse Boulger Garbage & Refuse Plant Bldg. Co., $13,000; John Pierce, Chicago, Ill., $18,500; Charles F. Walthers, Pittsburgh, Pa., $15,230; Levine & Kitchen, Chicago, Ill., $13,500; W. H. McGuire, Hobart, Okla., $13,999; Specialty Engineering Co., Houston, Tex., $11,500.

STREETS AND ROADS.

(**Denotes that this work is advertised in Engineering News.*)

Boston, Mass.—Bids will be received until Dec. 18 by the Public Grounds Dept. for soil work on Boston Common. C. Henry Sullivan is Supt. of Public Grds.

Brookline, Mass.—Boyleston St. is to be widened to 80 ft., between Cypress and High Sts. Alexis H. French is Town Engr.

Boston, Mass.—A metropolitan improvement commission will probably soon be appointed to devise a scheme for planning for the future development of the metropolitan district, especially in regard to boulevards, parks and transportation facilities.

Waterbury, Conn.—The only bid received Dec. 5 by the Board of Public Works for about 1,800 sq. yds. of bituminous macadam pavement on Willow St. was submitted by the Warren Bros. Co., Boston, Mass., at $2.85 per sq. yd. for paving and 75 cts. per lin. ft. for curbing. Noted Nov. 30.

New York, N. Y.—Bids will be received until 11 a. m., Dec. 20 by Alfred E. Steers, Pres. Boro. Brooklyn, for paving various streets.

Bids will be received until 11 a. m., Dec. 22 by Maurice E. Connolly, Pres. Boro. Queens, for paving various streets.

Syracuse, N. Y.—The Board of Contract and Supply has received bids for grading Teall Ave., between James and Manlius Sts., as follows: Blanche Gaffey, $6,937; Frank S. Sposato, $7,389; J. C. Dempsey, $7,508; W. J. Burns Co., $6,551; James Swift, $6,739; C. T. Hookway Construction Co., $6,574.

+Troy, N. Y.—The contract for the improvement of Belle Ave. has been awarded to GOLDEN & ALLEN, at $7,378 for granite construction, or $6,564 for concrete construction.

+Yonkers, N. Y.—The Board of Contract and Supply has awarded to R. A. DESTRANGE, at $24,225, the contract for regulating and grading Prescott St., from Yonkers Ave. to Elm St.

Atlantic City, N. J.—The State Road Commission has approved plans for the construction of an ocean boulevard to extend from Chelsea, through Ventnor and Margate.

Ventnor City, (Atlantic City post-office) **N. J.**—We are officially advised that bids were received by the City engineer Dec. 6, as follows for paving Atlantic Ave.: H. G. Mulick Co., $76,263; Monroe Paving Co., $70,794; Sutton & Carsons, $78,397; Edward F. Fouder, $64,413; Cunningham Paving & Construction Co., $69,124; R. B. Newton, $84,733. Noted Nov. 30.

Connellsville, Pa.—The Commissioners of Westmoreland County have decided to construct four miles of brick highway from Leechburg to Sherersburg.

+Baltimore, Md.—The contract for opening streets, grading and installing a sewer system, in Caton Heights, property owned by the Siegwart Beam Co., has been awarded to JOHN FELTER and McCOLLOUGH & CO. Riding & Howard are Design. Engrs.

Cumberland, Md.—The city will pave Thomas, Wineow and Second Sts. with fire brick.

Barton Heights, (Richmond post-office) **Va.**—The town has voted $30,000 of bonds for streets and other municipal improvements.

Richmond, Va.—The state contemplates the construction of a road from Richmond to Washington, D. C., via Fredericksburg, Va. P. St. J. Wilson is State Highway Comr.

+Wheeling, W. Va.—The contract for paving Waynesburg Ave., has been awarded to W. A. KIDDER, at 93 cts. per sq. yd.

Jacksonville, Fla.—Bids will be received until 10 a. m., Dec. 29, by the Board of Commissioners of Duval County for paving New York Ave. with macadam. C. W. Ellis is Chn.

Louisville, Ky.—Bids will be received until 2 p. m., Dec. 18, by the Board of Public Works for paving three blocks on Pratt St. with vitrified block. Estimated cost, $15,000. Roger McGrath is Secy. Bd. Pub. Wks.

+Brandon, Miss.—We are officially advised that the contract for the construction of 65 miles of roads in District No. 2, Rankin County, has been awarded to M. H. THOMASON, Monticello, as follows: 25,000 cu. yds. earth excavation at 22 cts.; 1,000 cu. yds. rock excavation at 90 cts.; 55 miles of surfacing with machine, 18 ft. wide, 15 in. crown, including clearing and grubbing, at $105.60 per mile; 28,000 sq. yds. sand clay surface, 10½ cts. for mixing. Noted Nov. 16

+Akron, Ohio.—Contracts for paving streets in this city have been awarded as follows: paving of York St., from Howard St. to the corporation line, to McALONAN BROS., at $5,359; paving improvements on Center St., to E. McSHAFFREY & SON, at $33,038.

Cincinnati, Ohio.—Bids will be received until noon, Dec. 18, at the office of the Director of Public Service, City Hall, for the improvement of Phoenix Alley, from Baymiller St. to Arthur Alley. John J. Wenner is Clk.

Canton, Ohio.—The Board of Commissioners of Stark County have granted petitions for five miles of highway improvements to be made early next year.

Dayton, Ohio.—Bids will be received until noon, Dec. 21, by the Department of Public Service for improving various streets in Dayton. J. C. Ely is Dir. Pub. Ser.

Pleasant Ridge, Ohio.—Bids will be received until noon, Dec. 23, by the Village Clerk for grading, constructing cement curbs, macadamizing roadway, etc., on Harrison St., from Kincaid Road to Ridge Ave. H. B. Hayden is Vil. Clk.

+Springfield, Ohio.—The contract for grading, macadamizing, curbing and guttering Summitt St., has been awarded to W. F. PAYNE, at $5,851.

Indianapolis, Ind.—The Board of Trade of this city and the Commissioners of Marion and Hamilton counties are interested in the proposed construction of a boulevard from Indianapolis to Noblesville.

Bids will be received until 10 a. m., Dec. 22, by the Board of Public Works, for the improvement of Oakland Ave.

Indiana Road Improvements.

Bids will be received as follows for highway improvements in Indiana:

Dec. 27:

Anderson, by the Commissioners of Madison County, until 10 a. m., for six gravel roads in Monroe Township. W. T. Richards is Audr.

Jan. 1:

Huntington, by the Commissioners of Huntington County, for a gravel road in Dallas Township. John W. Weaver is Audr.

Jan. 2:

Vincennes, by the Commissioners of Knox County, until 2 p. m., for gravel roads in Vincennes and Washington Townships. John T. Scott is Audr.

Jan. 2:

Bloomfield, by the Commissioners of Green County, for macadam roads in Taylor and Fairplay Townships. Caswell H. Jennings is Audr.

Jan. 2:

Fowler, by the Commissioners of Benton County, for nine roads in Center Township. Lemuel Shipman is Audr.

Jan. 2:

Logansport, by the Commissioners of Cass County, until 10 a. m., for macadam roads in Eel and Miami counties. J. E. Wallace is Audr.

Jan. 18:

Portland, by the Commissioners of Adams and Jay counties, for a gravel road on Adams-Jay line. W. Lea Smith, Audr., Jay County.

+Herrin, Ill.—The contract for the construction of 43,000 ft. of granitoid sidewalks has been awarded to KEELEY & TWEENY, East St. Louis, at $52,841.

Hannibal, Mo.—Bids will be received until noon, Dec. 25, for paving and improving Hubbard St. W. H. Youse is City Clk.

Bonham, Tex.—The City Council has ordered the paving of West Fifth St., two blocks on West Fourth St.

+Bonham, Tex.—The City Council has awarded a contract for paving fourteen blocks, including North Main and West Fifth Sts., to the BERT HAHN CO., Ardmore, Okla.

+Denver, Colo.—The contract for the work in South Denver Improvement District No. 10 has been awarded to J. FRED ROBERTS, Denver, at $19,755.

Salt Lake City, Utah.—Bids will be received until 7.30 p. m., Dec. 15, by the Board of Public Works, for constructing cement sidewalks in Sidewalk Extension No. 158. H. G. McMillan is Chn.

+Clifton, Ariz.—We are officially advised that the contract for the construction of a 13-mile road from York Flat to Duncan-Clifton, has been awarded to J. T. HOLEMAN, at $8,497. Noted Nov. 30.

+Everett, Wash.—The contract for the improvement of Norton Ave. has been awarded, by the Board of Public Works to the ATLAS CONSTRUCTION CO., at $7,995.

+Pasadena, Cal.—Contracts for the construction of two concrete culverts at the intersection of New York and Allen Aves., and Mar Vista St. and New York Ave., have been awarded to J. W. GOWLER & CO., Pasadena, at $4,972 each. This same company has received a contract for the construction of two concrete culverts on Prospect Ave. and Santa Buenaventura St., at $5,002 each.

Berkeley, Cal.—Bids will be received until 5 p. m., Dec. 19 by the Board of Education for the improvement of the southern half of Allsbro Way. M. O. James is Secy of Bd.

+Santa Barbara, Cal.—The contract for the construction of the new sea level road between Santa Barbara and Ventura has been awarded to JOHN M. WILLIAMSON, Santa Barbara.

Santa Monica, Cal.—Bids will be received until 5 p. m., Dec. 18 by the City Council for improvement work, consisting of sidewalks, curbs, gutter, cluster electric light posts and fittings, on Michigan Ave., from 18th to Fourth Sts. G. A. Murray is Clerk.

+San Francisco, Cal.—The contract for grading and constructing sewers on various streets has been awarded to the SUNSET CONSTRUCTION CO., at $14,500.

Eagle Rock (Glendale post-office), **Cal.**—Bids were received as follows by the City Trustees for the improvement of Central Ave., from the plans of Bixby & White, Engrs., Mason Bldg., Los Angeles: L. H. McGovern, Higgins Bldg., Los Angeles, $11,822; Robert P. Law, $15,245; W. S. Cummings, $22,433; E. V. Parker, $12,253; J. R. Curtis, $15,959.

INDUSTRIAL WORKS.

(*+Denotes a contract awarded.*)

Lawrence, Mass. — The Jersey Ice Cream Co. will construct an ice cream factory on State Road., near Water St. Plans by Ashton & Huntress, 477 Essex St.

Milford, Mass.—The Standard Raincoat Co., Boston, has had plans prepared for the construction of a plant in Milford.

Malden, Mass.—The Wadsworth & Howland Paint Co. are planning the erection of a brick addition, 26 × 88 ft., three stories high, to their factory on Green St.

+New Haven, Conn.—The contract has been awarded to F. A. WARREN, New Haven, for an addition to the plant of the New Haven Boiler Works on Saltonstall Ave. The building will be of brick and steel, 48 × 136 ft., one story high. Noted Nov. 23.

+New Haven, Conn.—A contract has been awarded to L. BURTON SPERRY, New Haven, for an addition, 60 × 60 ft., of brick and steel, to the plant of the American Steel & Wire Co. on Fairmount Ave.

Bridgeport, Conn.—A. S. Meloy is preparing plans for an industrial building on Water St. for the Sprague Meter Co. The structure will be three or four stories, 60 × 168 ft., of brick, with steel frame, fireproof floors and a freight elevator.

+New Haven, Conn.—The contract for an addition to the plant of the New Haven Clock Co. on Franklin St. has been awarded to the GILLETTE CONSTRUCTION CO., 213 Malley Bldg., New Haven. The building will be four stories, 36 × 101 ft., of brick mill construction.

South Norwalk, Conn.—The Standard Oil Co. is planning the erection of a brick warehouse here to cost about $20,000. F. W. Clark, 25 Broadway, New York City, is the Arch.

Canajoharie, N. Y.—The Beechnut Packing Co., Canajoharie, will probably construct a reinforced-concrete addition to its plant.

Andover, N. Y.—The Andover Silk Mill Co. has been incorporated here by D. S. Forsheimer, White Plains, N. Y.; S. W. Long, New York City, and A. de l'Harpe, Lyons, France. A plant for the manufacture of silks will be established.

Batavia, N. Y.—The Batavia Rubber Co. has voted to increase its capital stock to $500,000, from $70,000, and contemplates erecting a large addition. Auto and solid rubber tires are to be made.

Buffalo, N. Y.—The North Buffalo Hardware Foundry Co., a newly incorporated company, has completed plans for a foundry building at Hertel Ave. and the Erie R. R.

Poughkeepsie, N. Y.—A. Bolognesi & Co., 45 Wall St., New York, N. Y., will erect a factory building here for the manufacture of carburetors. P. M. Lloyd, 1 Washington St., has completed plans and is receiving bids.

Utica, N. Y.—R. A. George has completed plans and is receiving bids for foundry, machine shop and warehouse to be erected on Turner St. by the New York Radiator Co.

Albany, N. Y.—Plans are being prepared for Durand & Marohn, Albany, for the construction of an addition. It will be three stories and basement, located on Beaver St.

Albany, N. Y.—The A. P. W. Paper Co., has had plans prepared for a reinforced concrete mill. The building will be two stories high and cost about $50,000.

Syracuse, N. Y.—The Brown Co., Syracuse, N. Y., will construct a 2-story and basement factory at Bellevue Ave. and Chester St.

Buffalo, N. Y.—The Czar Ignition Co., 732 Main St., Buffalo, has been incorporated, to manufacture spark plugs and other ignition apparatus. A factory may be built.

+Watertown, N. Y.—A contract has been awarded to the NATIONAL CONSTRUCTION CO. to build a foundry for Bagley & Sewall at Watertown. The contract involves about 500 tons of structural shapes.

Trenton, N. J.—The plant of the John A. Roebling's Sons Co., which was recently destroyed by fire, will be rebuilt. The probable cost will be $150,000.

Pittsburgh, Pa.—A building permit has been issued to the Fisk Rubber Co. for the construction of a 2-story brick factory building at 5933 Baune St. The cost will be $12,000.

The National Biscuit Co. is having plans prepared for enlarging a number of its plants. The cost will be about $1,000,000.

Erie, Pa.—The Erie Reduction Co. is planning to rebuild its plant.

Philadelphia, Pa.—Plans have been filed for an ice manufacturing plant, to be built at 53d St. and White Ave. for the American Ice Co., Philadelphia.

+Philadelphia, Pa.—The contract has been awarded to the PHILADELPHIA CONSTRUCTION CO. for the concrete work on a stock and brewhouse for the Class & Nachod Brewing Co., Tenth and Montgomery Aves. The cost will be about $51,000.

The Tabor Manufacturing Co. has purchased a five acre site at Stokley St. and will construct a factory.

The Excelsior Stove Works, Philadelphia, has purchased a 7-acre site at Eureka and Sepviva Sts., that city, and will erect a new plant.

Cumberland, Md.—The N. & G. Taylor Co., will erect a new dipping plant in South Cumberland. The company has been granted immunity from taxes for a period of ten years by the Cumberland City Council; also free water to the extent of 200,000 gallons a day.

+Baltimore, Md.—A contract has been awarded to JOHN T. MOYLAND, 117 Center St., for the erection of a factory for John Boyle Co. The cost will be about $25,000.

Atlanta, Ga.—The National Paper Co., Atlanta, Ga., will erect a plant of concrete, containing 100,000 sq. ft. of floor space. The cost will be about $75,000.

Jacksonville, Fla.—The Florida Metal Products Co., Jacksonville, has been organized with a capital of $150,000 stock to construct a plant for the manufacture of metal shingles, corrugated roofing, and Spanish tile.

New Orleans, La.—The United Fruit Co. will erect a $600,000 fruit precooling plant at Erato St.

Chattanooga, Tenn.—The American Aluminum Co., has purchased about 40 miles of territory on the banks of the Little Tennessee River and will construct aluminum works. The cost will be about $10,000,000.

Nashville, Tenn.—Reports state that Rutledge Smith will establish a glass factory in Nashville.

Louisville, Ky.—The Ruthven Railway Signal Co., is considering the construction of a factory to manufacture a train stopping device. A. L. Ruthven is interested.

Evansville, Ind.—The Presto Vending Machine Co., M. H. Palmer, Pres., will ask for bids for the construction of a factory building about Jan. 1.

Indianapolis, Ind.—A factory will be erected by the Empire Gear & Manufacturing Co., Frank S. Clark, Pres. A site has not yet been selected.

Gary, Ind.—The New York Central R. R. will soon start work on the construction of a freight yard at Gary.

Detroit, Mich.—Mildner & Eisen, 1018 Hammond Bldg., are preparing plans for the construction of a 2-story brew house for the Tivoli Brewery Co. The cost is $25,000.

+The following contracts have been awarded by R. E. Raseman, 1302 Penobscot Bldg., for the construction of a 2-story factory building for the Kelsey Wheel Co., 1208 Military Ave.: Structural iron, RUSSELL WHEEL & FOUNDRY CO., Chene St. and Belt Line R. R.; masonry, I. E. BOOMEN, Forest Ave. and Dequidne St.; carpentry, J. WHITTAKER & CO., 51 Church St.; cost, about $100,000.

+Detroit, Mich.—The following contracts have been awarded by Varney & Winter, Equity Bldg., Detroit, for the 2-story and basement factory for H. G. Row, 378 Hinden St.: Structural iron work to the DAIGLE-STEGER IRON WORKS, Congress and Fourth Sts., roofing to A. J. ORTH, 166 Hasting St., plumbing to BEAN & DELVILLE, 1478 Woodward Ave.

+Albert Kahn & E. Willey, Trussed Concrete Bldg., Detroit, have awarded the following contracts for the building for the Chalmers Motor Car Co., Jefferson Ave.; structural iron work to H. B. LEWIS, Ferry Ave. and Roby St., roofing to NOIGHT & SEXANER, 148 Sherman St. The estimated cost is $20,000.

Plans are being prepared by F. J. Bancroft, 1728 Ford Bldg., Detroit, for the construction of a 2-story factory for the American Harvester Co. The probable cost is $25,000.

+The general contract has been awarded by Albert Kahn & E. Wilby, Trussed Concrete Bldg., Detroit, to DE LESILE CULBERTSON, Penobscot Bldg., for blacksmith shop for Dodge Bros. The cost will be about $30,000.

Plans are being prepared by J. G. Kastler & Co., Chamber of Commerce Bldg., Detroit, for the construction of a 2-story and basement bakery on McGraw Ave. The cost is $20,000.

Bloomington, Ill.—The Dietz Machine Co., Bloomington, Ill., is having plans prepared for the construction of a new factory building.

+Waukegan, Ill.—The North Shore Consolidated Gas Co., of Waukegan, has awarded contract for the construction of a factory building in Waukegan to the SEMENT-SOLVAY CONSTRUCTION CO., of Syracuse, N. Y., at $100,000.

Chicago, Ill.—A 2-story and basement bakery, store and flat building, will be constructed by the Northwestern Baking Co., 1347 Milwaukee Ave. The cost is $40,000. Plans are being prepared by Maurice Spitzen, 9 South LaSalle St.

+DePere, Wis.—The general contract has been awarded to JOHN BROEKMANS for the construction of a steel and concrete pattern storage warehouse for the C. A. Lawton Co.

+Green Bay, Wis.—The Dorschel Produce Co. has awarded the contract for erecting a $12,000 warehouse to JOHN BLACHANSKY, Green Bay. Foeller & Schober are Archs.

Oshkosh, Wis.—The Termaat & Monahan Co. has had plans prepared for a new foundry building. It will have a floor area of about 10,000 sq. ft.

Milwaukee, Wis.—The National Brake & Electric Co. has increased its capital from $1,000,000 to $2,000,000 to provide for extensions and proposed enlargements.

Milwaukee, Wis.—Plans are being prepared for a $25,000 addition to the machine shop of The Falk Co. to be equipped for the manufacture of kerosene engines. Otto H. Falk is in charge.

Milwaukee, Wis.—The Milwaukee Auto Specialty Co., recently incorporated for $75,000, intends to erect a 5-story concrete building, including a garage and machine shop, at Chestnut and Seventh Sts. Dr. R. J. Fleischer is Pres.

The H. W. Johns-Manville Co. is asking bids for the construction of a $35,000 warehouse at 42d and State Sts.

Fort Dodge, Iowa.—A new factory will be constructed by the Bager Manufacturing Co., Fort Dodge. The probable cost will be about $100,000.

Minneapolis, Minn.—A 5-story brick and concrete addition will be erected by the Northwestern Knitting Co.

Minneapolis, Minn.—A 6-story addition of concrete, iron and marble will be constructed to the Kneipp Hydropathic Sanitarium, 1254 Penn Ave., Minneapolis. The cost will be about $75,000.

East Hutchinson, Kan.—The Atchison, Topeka & Santa Fe Ry. is contemplating building a 12-stall roundhouse. C. A. Morse, Topeka, Kan., is Ch. Engr.

Havelock, Neb.—A car shop will be constructed at Havelock by the Chicago, Burlington & Quincy R. R. J. W. Cyr, Chicago, Ill., is Supt. Motive Power. The cost will be about $1,000,000.

St. Louis, Mo.—Herbert Eichkorn, 4645 Virginia Ave., has purchased a site on which will be erected a stair making plant. The cost will be about $15,000.

Little Rock, Ark.—It is reported that a cotton factory, to cost about $80,000, will be constructed here. Carl Bear, Comr. of Chamber of Commerce is interested.

Alvin, Tex.—The Price-Booker Mfg. Co., of San Antonio, will establish a canning and pickling factory here. S. D. Price is Pres.

Dallas, Tex.—The Texas-Caddo Oil & Development Co. has been organized here with a capital of $50,000. The incorporators are H. T. Taylor, Ephraim Garonzik and H. W. Cutshall.

El Campo, Tex.—Travis F. Jones and James A. Logwood, of San Antonio, will build a canning factory near here.

Mission, Tex.—The Mission Cotton Co. will enlarge its cotton seed oil mill here.

Denver, Colo.—Plans are being considered for the Bayly-Underhill Manufacturing Co. for the construction of a new factory building.

+Los Angeles, Cal.—The contract has been awarded to YARD & HICHBORN, Trust & Savings Bldg., for the erection of a pre-cooling plant at San Bernardino for the Gate City Ice & Precooling Co. The work will include the erection of a reinforced-concrete ice-storage building. Estimated cost, $35,000.

San Diego, Cal.—The Fellows Boat Co. will erect a boat works on Hawthorn St. The main building will be two stories high, and will be equipped with wood-working machinery for building and repairing boats up to 70 ft. in length or 100 tons displacement.

Hamilton, Ont.—Announcement has been made at the office of the Dominion Canners, Ltd., that $500,000 has been appropriated for extending their plants in various centers. A plant, estimated to cost $100,000, will be built in Hamilton.

Welland, Ont.—Plans for the Canadian plant of the John Deese Mfg. Co. have been completed and building operations will be commenced as early as possible in the spring. The plant will cost about $1,000,000.

+Fort William, Ont.—The Grand Trunk Pacific Ry. has retained JOHN S. METCALF CO., LTD., Montreal, Quebec and Chicago, to design and construct a 2,500,000-bu. concrete storage elevator at its Mission Island Terminal, Fort William, Ont. The estimated cost is $500,000. The ultimate capacity of the grain terminal as laid out contemplates a total storage capacity of 40,000,000 bu.

Hinson, Ont.—Plans are being prepared by Crane & Pennington, Bogue Bldg., Hinson, for the construction of a 1-story auto factory for the Hupp Corporation, Lycaste Ave. The cost will be about $40,000.

MISCELLANEOUS CONTRACTS.

(**Denotes that this work is advertised in Engineering News.*)

U. S. RECLAMATION SERVICE.—All news concerning canal and irrigation projects, etc., will be found under Water Supply—Irrigation.

+Wharf and Pier.—Boston, Mass.—Bids were received as follows Dec. 2 by the Fire Department for the construction of a wharf and pier for fire-boats at Northern Ave. Bridge: LAWLER BROS., 16 City Square, Charlestown, Mass., $10,219 (awarded contract); George T. Rendle, $11,228; W. G. Rendle & Son, $11,288; H. H. Hersey, $12,840.

Pier and Bulkhead.—Providence, R. I.—Bids were received as follows Nov. 28 by the State Harbor Improvement Commission for the construction of Pier 1 and bulkhead here: F. E. SHAW, Providence, $189,209 (awarded contract), alternate bids, $174,450 (for timber pier and reinforced-concrete bulkhead) and $154,740 (for reinforced-concrete pier and bulkhead); W. L. Bull, Jr., & Co., $208,291; T. A. Scott Co., $209,650; Sanford & Brooks Co., $212,416; Wm. L. Miller, $216,805; General Contracting & Engineering Co., $217,839; alternate bid, $211,610 (substituting creosoted Virginia pine piles); Phoenix Construction Co., $220,955; McHarg-Barton Co., $222,719; W. H. Keyes & Co., $223,304; Coleman Bros., $226,004; Butler Bros. Construction Co., $228,942; W. H. Ellis, $234,823; N. Y. Submarine Contracting Co., and McKinnon Construction Co., $237,501; alternate bids, $233,942 (substituting creosoted short-leaf yellow pine piles), and $201,909 (substituting untreated short-leaf yellow pine piles); Willmarth & MacKillon, $267,708.

Comfort Station.—Providence, R. I.—The Common Council is considering the construction of a comfort station and shelter house north of Market Sq. Estimated cost, $50,000. William E. Clarke is City Clk.

Fire Hose.—Hartford, Conn.—Bids will be received until 11 a. m., Dec. 18, by the Board of Contract and Supply for furnishing to the Fire Department 2½-in. knit, double-jacket rubber lined fire hose. Specifications are on file at the office of the Board of Fire Commissioners.

Cable.—New London, Conn.—Bids will be received until 3 p. m., Dec. 26, by Capt. A. E. Waldron, Corps Engrs., U. S. A., New London, for furnishing insulated cable.

+Barge Canal.—Albany, N. Y.—The contract has been awarded by Charles E. Tremen, Supt. Pub. Wks., Albany, to the T. A. GILLESPIE CO., 50 Church St., New York, for Barge Canal Contract No. 10-A, providing for the completion of the canal at Fulton and raising the upper dam on the Oswego River and the construction of a dike, at $106,738. Bids were opened Dec. 5. List of bidders noted Dec. 7.

River Improvement.—Buffalo, N. Y.—Bids will be asked soon by the city for the further improvement of the Buffalo River. The plans call for widening and straightening the river as well as dredging. When the work is completed, the channel will be 225 ft. in width and from 19 to 23 ft. deep. From the Kelderhouse turning basin to the city line on the Buffalo River and to Cazenovia St. on the creek the work will be confined to widening, deepening and straightening these streams for flood abatement purposes. Francis G. Ward is Comr. Pub. Wks.

+Trolley Platform.—New York, N. Y.—Bids were received Dec. 7 by Calvin Tompkins, Comr. of Docks, for Contract No. 1290. This calls for removing the present wooden trolley platform and building a new platform of steel and concrete at St. George Ferry Terminal, Boro. Richmond. The contract has been awarded to the N. Y. STATE CONSTRUCTION CO., 80 Broad St., New York, at $149,905.

Elevators, Etc.—New York, N. Y.—Bids will be received until Dec. 18 by C. B. J. Snyder, Supt. School Bldgs., Manhattan Boro., for installing electric elevators and ash hoists in Washington Irving High School, Boro. Manhattan.

+Subway.—New York, N. Y.—The Public Service Commission awarded the contract Dec. 8 to PATRICK McGOVERN, 6 Beacon St., Boston, Mass., for constructing under revised plans, Section 9, Route 5, of the Lexington Ave. Subway, Tri-Borough Subway System, at $1,961,997. Other bidders were: Degnon Contracting Co., $2,080,324; J. F. Cogan Co., $2,112,621; Keystone State Construction Co., $2,191,972; Holbrook, Cabot & Rollins Corporation, $2,248,990; Hugh Nawn Contracting Co., $2,336,680; S. Pearson & Son, Inc., $2,570,971; Bradley Contracting Co., $2,623,506; Richard E. Henningham, $2,624,405; United Engineering & Contracting Co., $2,637,877; Oscar Daniels Co., $2,711,221. Bids were opened Dec. 5. Bids under original plans were opened Oct. 27, 1910, and noted Nov. 3, 1910.

Fire Station, Etc.—Newark, N. J.—Bids will be received until Dec. 18 by the Committee on Public Buildings of the Common Council, for the construction of a central fire-station in Academy St. Separate bids will be received for the following: Mason work; structural steel work; roofing and copper work; carpenter and cabinet work and hardware; plumbing and gas piping; heating; electric wiring; painting. Contractors may also make a total estimate combining and including all the work covering the erection and completion of the building. Bids will be received at the same time for the construction of a fire apparatus house in Mt. Prospect St. Plans and specifications for the fire-apparatus house may be seen at the office of Alfred Peter, Arch., Metropolitan Bldg., Newark, and for the fire station at the office of J. H. & W. C. Wilson, Archs., Firemen's Bldg., Newark.

+Tunnel and Sheds.—Allentown, Pa.—The contract has been awarded by the Great Allentown Fair, H. B. Schall, Secy., for constructing a tunnel under the racetrack, and for cattle sheds, to ROBERT RATHBUN, Allentown, at $3,650 for the tunnel and $13,325 for the sheds.

+Shed and Platform.—Baltimore, Md.—The Maryland & Pennsylvania Terminal Co., J. S. Norris, Gen. Mgr., North Ave. and Oak St., Baltimore, has awarded the contract to ROBERT W. BOWERS for erecting a 2-story frame shed and platform, 450 × 40 ft. on Falls Rd. near Glen Edwards Ave., at about $12,000.

Stable.—Baltimore, Md.—George T. Carroll, 1210 Continental Bldg., Baltimore, is preparing plans for a stable for the Street Cleaning Department on Ridgeley St., near West St., of brick and stone construction 150 × 80 ft. A shed for vehicles will also be erected. Estimated cost, $65,000.

+Stable.—Baltimore, Md.—The city has awarded the contract to R. B. MASON, 210 East Lexington St., Baltimore, for erecting a stable on Greenmount Ave., near North Ave., for the Street Cleaning Department.

+Lead.—Washington, D. C.—The Commissioners of the District of Columbia have awarded the contract for furnishing 250,000 lbs. of pig lead to LOUIS HOFFENMEYER, Washington, at $11,100. Bids were opened Nov. 27. List of bidders noted Dec. 7.

Projectiles.—Washington, D. C.—Bids for furnishing 20,000 5-in. 50-pounder common projectiles and 50,000 1-pounder target projectiles will be received by the Bureau of Ordnance, Navy Dept., Washington, until noon, Dec. 19. Attention is invited to the provisions of the Naval Appropriation Act of March 4, 1911, relative to combination to prevent free competition and in restraint of trade. Forms of proposal and all formation may be obtained from N. C. Twining, Ch. of Bureau.

***Dredging.**—Washington, D. C.—Bids will be received until noon, Jan. 8, by Col. W. C. Langfitt, Corps Engrs., U. S. A., Washington, for dredging in Anacostia River.

+Gun Carriages.—Washington, D. C.—Contracts have been awarded as follows by the Bureau of Ordnance, Navy Dept., Washington, for gun carriages, etc.: For 32 6-in. howitzer limbers and caissons, Model 1909, to A. & J. M. ANDERSON, Boston, Mass.; 162 3-in. gun limbers, Model 1902, BETHLEHEM STEEL CO., South Bethlehem, Pa.; 40 4-7-in. gun limbers and caissons, Model 1908, A. & J. M. ANDERSON; 120 3-in. gun caissons, Model 1902, divided between AMERICAN-BRITISH MFG. CO., Bridgeport, Conn., and BETHLEHEM STEEL CO. Bids were opened Dec. 1. List of bidders noted Dec. 7.

Roof Trusses, Etc.—Washington, D. C.—Bids will be received by the Bureau of Yards and Docks, Navy Dept., Washington, until 11 a. m., Dec. 30, for steel roof trusses, purlins, braces, etc., at the U. S. Naval Magazines, Iona Island, N. Y., and Lake Denmark, N. J. Plans and specifications can be obtained on application to the Bureau, and are also on file at the office of Engineering News, New York. R. C. Hollyday is Ch. of Bureau.

Steel.—Washington, D. C.—Bids will be received until Dec. 26 by the Bureau of Supplies and Accounts, Navy Dept., Washington, for furnishing 171,000 lbs. of bar steel under Schedule 4155, at the navy yard, Washington.

Pier.—Newport News, Va.—The Chesapeake & Ohio Ry. Co., H. Pierce, Ch. Engr. Const., Richmond, Va., will construct a steel coal pier here, it is reported.

Hulls and Boilers.—Charleston, S. C.—Bids were received as follows Dec. 1 by Major G. F. Howell, Corps Engrs., U. S. A., for two steel hulls and boilers for combination dredges and snagboats "Pedee" and "Wateree": (a) one hull; (b) two hulls; (c) one boiler; (d) two boilers; (e) type of boilers; (f) two hulls and boilers: Valk & Hurdock Iron Works, Charleston, (c) $2,300, (d) $4,500, (e) Scotch; The Marion Steam Shovel Co., Marion, Ohio, (b) $36,000, (d) $2,700 and $4,000, (e) locomotive and Scotch; (f) $38,700 and $40,000; U. S. Navy Yard, Charleston (estimate), (b) $20,000; The Pusey & Jones Co., Wilmington, Del., (a) $17,800, (b) $34,700, (c) $2,065 and $2,315, (d) $4,100 and $4,600, (e) locomotive and Scotch, (f) $38,800 and $39,300; American Locomotive Co., 30 Church St., New York, (a) $18,541, (b) $34,000, (c) $2,770 and $3,945, (d) $5,450 and $7,690, (e) locomotive and Scotch, (f) $39,450 and $41,690; Phoenix Iron Works Co., Meadville, Pa., (c) $1,600 and $1,800, (d) $3,200 and $3,600, (e) locomotive and Scotch; Ellicott Machine Co., Baltimore, Md., (b) $34,200; Merrill-Stevens Co., Jacksonville, Fla., (a) $17,500, (b) $33,500, (c) $2,000, (d) $3,750, (e) Scotch, (f) $37,250; Kingsford Foundry & Machine Works, Oswego, N. Y., (d) $3,150, (e) Scotch; same bidder, (d) $3,075, (e) locomotive; M. A. Sweeney S. Y. & Foundry Co., Jeffersonville, Ind., (a) $17,330, (b) $34,660, (c) $1,780 and $1,980, (d) $3,560 and $3,960, (e) locomotive and Scotch, (f) $38,220 and $38,620 (received late).

Wharves.—Augusta, Ga.—Nisbet Wingfield, City Engr., is preparing preliminary plans for constructing combined docks and warehouses along the waterfront.

Subways.—Memphis, Tenn.—The Southern Ry., W. H. Wells, Ch. Engr. Const., Washington, D. C., and other railways, it is reported, are considering the construction of subways here.

Ditches.—Memphis, Tenn.—Bids will be received until 2 p. m., Dec. 30, by the Mary Mac Plantation Co., Memphis, for the construction of 216,000 yds. of dredge ditches and 210,000 yds. of small lateral ditches. Information concerning the work may be obtained from the Morgan Engineering Co., 610 Goodwyn Institute, Memphis. Specifications are on file at the office of Engineering News, New York.

+Retaining Wall.—Brazil, Ind.—The Commissioners of Clay County, Brazil, have awarded a contract to VARIS GODFREY AND EDWARD HUBER, Bowling Green, Ind., for the construction of a retaining wall along Eel River on the Bowling Green Pike.

Drain.—Newport, Ind.—Bids will be received by Herbert Wells, Drainage Comr. Spencer County, Newport, until 4 p. m., Dec. 20, for the construction of a drain and spurs in Ohio, Luce and Grass Townships.

***Lock Gates.**—Detroit, Mich.—Bids will be received until 3 p. m., Jan. 15, by Col. C. McD. Townsend, Corps Engrs. U. S. A., Federal Bldg., Detroit, for lock gates.

***Timber.**—Detroit, Mich.—Bids will be received by Col. C. McD. Townsend, Corps Engrs., U. S. A., Federal Bldg., Detroit, until 3 p. m., Jan. 15, for furnishing and delivering about 130 M ft. B. M. of white oak timber for use at St. Marys Falls Canal, Mich.

+*Repairs to Canal Wall.—Sault Ste. Marie, Mich.—The CULLEN-FRIESTEDT CO., 7 South Dearborn St., Chicago, Ill., has been awarded the contract for making repairs to the canal wall at Sault Ste. Marie, Mich., at $40,802. Bids were opened Nov. 20 by Col. C. McD. Townsend, Corps Engrs., U. S. A., Detroit, Mich. List of bidders noted Nov. 30.

+Ditches.—Carmi, Ill.—Bids were received Dec. 1 by the Partridge Drainage District Commissioners, Carmi, for the construction of ditches aggregating 76,278 cu. yds. The contract has been awarded to JOHN F. PUMPHREY, Maunie, Ill., at about $11,000.

Drainage District.—Edwardsville, Ill.—Bids will be received until Dec. 16 by Madison County at the office of Hiles & Simpson, Edwardsville, for the construction of the Silver Creek Drainage District. H. J. Mackinaw, Edwardsville, is County Clk.

+Coffer-Dam.—Black River Falls, Wis.—The Common Council has awarded a contract to LEWIS & McDONALD, Black River Falls, for constructing a coffer-dam and retaining wall to cost $25,000 and contain 4,000 yds. of reinforced concrete.

Drainage Work.—Eldora, Iowa.—Bids will be received until noon, Jan. 4, by E. L. Marriage, County Audr., Eldora, for the construction of drainage work in District No. 25.

Dredging.—Jefferson, Iowa.—The Board of County Supevisors has decided to dredge Snake Creek. Estimated cost, about $18,000.

Tile Drain.—Rockwell City, Iowa.—Bids will be received by C. O. Dixon, County Audr., Rockwell City, until 2 p. m., Dec. 28, for the construction of Tile Drain No. 149, located in Sections 15 to 22 and 27 to 33, Calhoun Township.

+Ditch.—Olivia, Minn.—The contract has been awarded to JENSEN & CHRISTIANSEN, Hutchinson, Minn., by J. L. Johnson, County Audr., Renville County, Olivia, for County Ditch No. 48, at $15,936. Bids were opened Nov. 24. List of bidders noted Dec. 7.

Ditch.—Red Lake Falls, Minn.—Bids will be received by A. A. Latendresse, County Audr., Red Lake Falls, until 2 p. m., Dec. 29, for the construction of Judicial Ditch No. 2 in Red Lake and Pennington Counties. Bids will be received as a whole or for sections of 100 ft. The work will require 86,128 cu. yds. of earth removal. Estimated cost, $12,098.

Elevator.—Fort D. A. Russell, Wyo.—Bids will be received until 3.30 p. m., Dec. 22, by Capt. F. S. Armstrong, Constr. Q. M., U. S. A., Fort D. A. Russell, for furnishing and installing an electric elevator at Fort D. A. Russell.

Excavators.—Boise, Idaho.—See item under Water Supply—Irrigation.

Drainage Ditch.—Auburn, Neb.—Bids will be received by Frank E. Black, County Audr., Auburn, until 10 a. m., Dec. 27, for constructing a drainage ditch in Sections 1 and 2.

Monument.—Little Rock, Ark.—Bids, designs and models will be received until Jan. 19 by the Women of the Confederacy in Arkansas, Little Rock, for the construction of a monument, pedestal or base to be of Arkansas granite. B. W. Green, State Bank Bldg., Little Rock, is interested.

+Dredge Work.—Stuttgart, Ark.—The POLLARD-CAMPBELL DREDGE CO., Omaha, Neb., has been awarded the contract for 450,000 cu. yds. of dredge work in Stuttgart-Kings Bayou

Drainage District No. 6, at 13.6 cts. per cu. yd. The contract for 40,000 cu. yds. of team-work excavation for laterals has been let to E. J. HAHN, Little Rock, Ark., at 15½ cts. per cu. yd.

Stable.—Yoakum, Tex.—A 2-story stable 100 × 100 ft., will be constructed here for H. Seecamp, Yoakum.

Bath-house. — Guthrie, Okla. — The city has issued $100,000 of bonds for the construction of a bath-house.

Temperature System.—Bellingham, Wash.—Bids will be received until 3 p. m., Jan. 4, by James Knox Taylor, Superv. Arch., Treasury Dept., Washington, D. C., for installing an automatic temperature control system in the U. S. post-office at Bellingham,

Drydock.—Seattle, Wash.—The Moran Co., foot of Charles St., Seattle, will construct its proposed new dock with its own forces. Estimated cost, between $200,000 and $300,000. J. V. Paterson is Pres. and Gen. Mgr. Noted Nov. 23.

+Wharf, Jetty Work.—Portland, Ore. —The contract for constructing the receiving wharf and extending the north jetty at the mouth of the Suislaw River has been awarded to JOHNSON & ANDERSON, Portland, Ore., at $200,683. Bids were opened by Maj. J. J. Morrow, Corps Engrs., U. S. A., Portland. Noted Sept. 7 and Oct. 26.

Dredge.—Portland, Ore.—The contract will probably be awarded in February for the construction of a dredge for Coos Bay, Ore. Bids will be received after Dec. 21 by Maj. J. J. Morrow, Corps Engrs., U. S. A., Portland. The amount available is $350,000. Noted Nov. 23.

Pier.—San Francisco, Cal.—Bids will be received by the State Board of Harbor Commissioners until Jan. 11 for the construction of Pier No. 17.

+Immigration Station.—Quebec, Que. —The contract for the construction of the immigration station on Princess Louise Dock, Quebec, has been awarded to C. C. DEAKIN, Montreal, Que.

+Wharves, Boathouse. — Kingston, Ont.—The contract has been awarded to GOWAN & WHITNEY, Brockville, Ont., for the construction of new wharves and a boathouse at the Royal Military College here, at about $20,000.

Cement.—Winnipeg, Man.—Bids will be received until Dec. 18 by the Chairman of the Board of Control for furnishing 25,000 bbls. of cement, f. o. b. cars City Yards. M. Peterson is Secy. Bd.

Telephone Poles—Regina, Sask.—Bids will be received until noon, Dec. 15, by S. P. Porter, Deputy Minister of Rys. and Telephones, Regina, for furnishing 132,000 telephone poles.

+Frontera, Mex.—The Mexican Government has awarded the contract to the NORTH AMERICAN DREDGING CO., Galveston, Tex., for improving the harbor here. Estimated cost, about $2,000,000.

U. S. POSSESSIONS AND CUBA.

*(*Denotes that this work is advertised in Engineering News.)*

Piles and Lumber.—Panama.—Bids will be received by Maj. F. C. Boggs, Corps Engrs., U. S. A., Gen. Pur. Officer, Isthmian Canal Comn., Washington, D. C., until 2.30 p. m., Dec. 18, for furnishing piles and lumber under Circular No. 665.

+Material for Chain Fenders.—Panama.—The contract has been awarded to the UNITED ENGINEERING & FOUNDRY CO., Farmers' Bank Bldg., Pittsburgh, Pa., for Group I, for material for one chain fender or unit, for trial, at $21,113. Bids were opened Nov. 14. List of bidders for material for chain fenders for all locks on the Panama Canal were noted Nov. 23.

Quarantine Station Bldgs.—Porto Rico.—Bids were received as follows Dec. 5 by James Knox Taylor, Superv. Arch., Treasury Dept., Washington, D. C., for the construction of five buildings at San Juan, P. R.: H. P. Converse Co., Boston, Mass., $98,820; Algernon Blair, Montgomery, Ala., $74,490; Purdy & Henderson, New York $82,475; P. J. Carlin Construction Co., 16 East 23d St., New York, $69,975.

Buildings.—Hawaii.—Bids were received as follows Dec. 1 by the Quartermaster of the Marine Corps, Navy Dept., Washington, D. C., for the construction at the Naval Station, Pearl Harbor, H. T., of (a) barracks; (b) four junior officers' quarters; (c) commandant's quarters: W. M. Concannon, San Francisco, cal., (a) $163,000, (b) $61,600, (c) $22,800; Lloyd Engineering Co., Honolulu, H. T., (a) $141,000, (b) $56,000, (c) $20,000; Wm. E. Keir, Honolulu, (a) $122,392, (b) $43,476, (c) $16,087; Spalding Construction Co., Portland, Ore., (a) $116,673, (b) $46,346, (c) $18,268; Sound Construction & Engineering Co., Seattle, Wash., (a) $130,843.

+Equipment. — Panama.—The PELTON WATER WHEEL CO., 90 West St., New York, and San Francisco, Cal., has been awarded the contract for the complete hydraulic power equipment for the hydroelectric plant in connection with the Panama Canal. This will consist of three 3,600-HP. vertical shaft, Pelton Francis turbines operating under 75-ft. head at 250 r. p. m., for driving General Electric steam-turbine type generators; three pipe lines each 10 ft. 6 ins. in diameter and approximately 300 ft. long; Pelton oil pressure water-wheel governors and head gates. The plant will be located at Gatun Dam. Bids were opened Oct. 24 by Maj. F. C. Boggs, Corps Engrs., U. S. A., Gen. Pur. Officer, Isthmian Canal Comn., Washington, D. C. Noted Oct. 26.

Material for Rack Railway, Etc.—Panama.—Bids will be received until 10.30 a. m., Jan. 6, by Maj. F. C. Boggs, Corps Engrs., U. S. A., Gen. Pur. Officer, Isthmian Canal Comn., Washington, D. C., for miscellaneous material for rack railway and miter gates, including track bonds, flexible and solid conduit junction boxes and conduit fittings, steel splice bars, brass pins, sheet asbestos, pads, etc., under Circular 666. Blanks and general information may be obtained at Washington or at the offices of the Assistant Purchasing Agents, 24 State St., New York; 614 Whitney-Central Bldg., New Orleans, La., and 1086 North Point St., San Francisco, Cal.; also from the U. S. Engineer offices in the following cities: Seattle, Wash.; Los Angeles, Cal.; Baltimore, Md.; Philadelphia, Pa.; Pittsburgh, Pa.; Boston, Mass.; Buffalo, N. Y.; Cleveland, Ohio; Cincinnati, Ohio; Chicago, Ill.; St. Louis, Mo.; Detroit, Mich.; Milwaukee, Wis.; St. Paul, Minn.; Chattanooga, Tenn.; Louisville, Ky.; Mobile, Ala., and Galveston, Tex.; at the Commercial Club, Kansas City, Mo.; Chamber of Commerce, Quincy, Ill., and Commercial Club, Tacoma, Wash.

EXAMINATIONS.

Surveyor. — Washington, D. C.—The U. S. Civil Service Comission announces an examination on Jan. 10-11 for surveyor in the General Land Office. In order to obtain a rating of 70% or over in training and experience, applicants must have had not less than one season in the field in charge of party or as principal assistant, or two seasons in some subordinate field position, in the surveying of public lands. Higher ratings will be given for more extended experience.

Specialist in Rural Engineering.—Washington, D. C.—The U. S. Civil Service Commission announces an examination to be held Jan. 3, 1912, to secure eligibles from which to make certification to fill a vacancy in the position of Specialist in Rural Engineering, Office of Experiment Stations, Department of Agriculture, at Washington, D. C., at a salary of from $1,500 to $1,800 a year, and vacancies requiring similar qualifications as they may occur, unless it is found to be in the interest of the service to fill the vacancy by reinstatement, transfer or promotion. The examination will consist of the subjects mentioned below, weighted as indicated: General education and training in engineering, particularly along lines related to rural engineering, including drainage, farm machinery, road building, irrigation, etc. (Special credit will also be given for training in foreign languages.), 45 points; experience in the various branches of rural engineering and familiarity with the literature of the subject, including also experience in and fitness for editorial or bibliographic work, 45 points; thesis of about 1,000 words on some subject in rural engineering to be selected by the applicant, 10 points. Applicants must have reached their 22d birthday. Examination form 304 and special form.

Senior Highway Engineer.—Washington, D. C.—The U. S. Civil Service Commission announces an examination to be held Jan. 3, 1912, to secure eligibles from which to make certification to fill several vacancies in the position of Senior Highway Engineer, Office of Public Roads, Department of Agriculture, at salaries ranging from $2,000 to $2,400 a year, and vacancies requiring similar qualifications as they may occur, unless it is found to be in the interest of the service to fill the vacancies by reinstatement, transfer or promotion. The duties of this position will involve considerable traveling throughout the United States, largely for the purpose ,of superintending the construction of object-lesson roads of various types. In addition, the engineer will be called upon to inspect roads and investigate road-building material in counties for the purpose of reporting upon a system by which the best administration, construction, and maintenance of a county road system may be secured. The inspecting of roads locally and giving advice in regard to their improvement and the giving of adresses at road meetings will also be included as a part of the duties of this position. The examination will consist of the subjects mentioned below, weighted as indicated: General education and technical training, 40 points; professional and technical experience and fitness, 50 points; experience in delivering lectures and addressing meetings, 10 points. Applicants must have reached their 30th birthday. Examination form 304 and special form.

CONTRACT PRICES.

*(*Denotes that this work is advertised in Engineering News.)*

Subway.—New York, N. Y.—Bids for Route 5, Section 9 of the Triborough Subway, were received Dec. 5 by the Public Service Commission as follows: (A) PATRICK McGOVERN, 6 Beacon St., Boston, Mass., (awarded contract), (B) Degnon Contracting Co., (C) J. F. Cogan Co., (D) Keystone State Construction Co., (E) Holbrook, Cabot & Rollins, (F) Hugh Nawn Contracting Co., (G) S. Pearson & Son, Inc., (H) Bradley Contracting Co., (I) Richard E. Henningham, (K) United Engineering & Contracting Co., (L) Oscar Daniels Co.:

ROUTE 5, SECTION 9, SUBWAY, NEW YORK.

	A.	B.	C.	D.	E.	F.	G.	H.	I.	K.	L.
107,300 cu. yds. earth excavation	$3.50	$3.85	$4.00	$3.65	$4.35	$4.50	$5.25	$3.50	$6.00	$6.00	$4.80
18,700 cu. yds. earth excavation for sewers and pipes.	3.75	3.85	6.00	5.00	4.35	4.50	4.25	5.00	4.50	6.00	6.00
30,200 cu. yds. rock excavation	4.65	6.50	5.50	4.50	6.15	5.50	6.50	6.00	7.55	5.50	8.00
600 cu. yds. rock excavation for sewers and pipes	10.00	6.50	10.00	6.00	6.50	6.00	6.50	6.00	10.00	8.00	7.00
900 lin. ft. underpinning buildings less than 7 stys.	82.00	85.00	100.00	120.00	75.00	150.00	106.00	200.00	100.00	150.00	125.00
52,900 cu. yds. tunnel excavation	8.25	8.00	8.50	8.50	9.50	9.00	9.25	12.00	10.45	10.00	12.00
33,000 cu. yds. concrete masonry	9.00	9.50	8.00	9.50	10.50	11.00	11.30	12.00	10.00	9.00	12.00
2,160 cu. yds. concrete masonry outside W. P.	9.00	7.00	7.00	7.00	4.50	8.00	11.30	10.00	10.00	9.00	12.00
3,270 cu. yds. rubble stone masonry	7.00	6.50	5.00	7.00	4.50	8.00	8.50	8.00	7.00	5.50	8.00
2,750 cu. yds. brick masonry	15.00	16.00	12.00	14.00	11.50	15.00	17.00	15.00	15.00	14.00	15.00
2,000 bbls. cement grout	4.00	1.50	3.00	4.00	4.50	4.00	3.70	4.50	4.00	4.00	7.00
30 cu. yds. broken stone or gravel	2.75	3.00	3.00	2.50	2.25	2.50	2.50	2.50	2.50	2.00	2.50
5,640 sq. yds. waterproofing, 1-ply	.50	.55	.35	.60	.32	.70	.90	.75	.75	.70	.50
100 sq. yds. waterproofing, 2-ply	60	.85	.70	.90	.54	.80	1.15	1.00	1.00	1.05	.85
15,700 sq. yds. waterproofing, 3-ply	.85	1.10	1.00	1.30	.77	.95	1.50	1.50	1.50	1.50	1.20
100 sq. yds. waterproofing, 4-ply	1.50	1.45	1.15	1.70	.95	1.10	2.00	1.75	1.75	1.75	1.60
100 sq. yds. waterproofing, 5-ply	2.00	1.75	1.30	2.00	1.30	1.40	2.40	2.00	2.00	2.06	2.00
100 sq. yds. waterproofing, 5-ply	3.00	2.05	1.45	2.30	1.50	1.70	2.80	2.50	2.50	2.25	2.40
700 cu. yds. brick in asphalt mastic	25.00	30.00	25.00	27.00	26.00	25.00	45.00	30.00	28.00	35.00	27.00
100 lin. ft. 12-in. vitrified drain pipe	1.50	.80	1.75	1.60	.80	1.40	.52	1.75	1.50	1.20	1.20
100 lin. ft. 10-in. vitrified drain pipe	1.25	.55	1.50	1.40	.75	1.15	.50	1.50	1.25	.85	1.20
5,830 lin. ft. 8-in. vitrified drain pipe	1.00	.30	1.25	1.20	.65	.75	.30	1.25	1.00	.50	1.20
200 lin. ft. 6-in. vitrified drain pipe	.75	.25	1.00	.90	.60	1.00	.25	1.00	.80	.40	.60
100 lin. ft. 4-in. vitrified drain pipe	.50	.20	.75	.60	.55	.75	.15	.75	.75	.30	.50
100 lin. ft. 6-in. c.-i. drain pipe	1.00	.95	1.50	1.30	.80	1.00	.85	1.50	1.25	1.50	1.25
6,620 lin. ft. 4-in. c.-i. drain pipe	.90	.75	1.00	1.00	.75	.80	.55	1.00	1.00	1.20	1.00
480,500 duct ft. tunnel ducts	.10	.10½	.10	.12	.08	.10	.15	.15	.12	.15	.14
830 tons riveted steel	70.00	75.00	85.00	83.00	78.00	80.00	120.00	80.00	80.00	90.00	85.00
950 tons steel beams	62.00	60.00	80.00	75.00	65.00	75.00	78.00	70.00	75.00	80.00	80.00
660 tons steel rods and bars	45.00	60.00	80.00	70.00	46.00	60.00	70.00	65.00	65.00	75.00	65.00
65 tons c.-i. columns	70.00	80.00	85.00	70.00	73.50	70.00	90.00	75.00	75.00	75.00	65.00
70 tons miscellaneous c.-i. castings	70.00	100.00	75.00	75.00	74.50	70.00	90.00	75.00	75.00	75.00	40.00
100 lbs. wire mesh	.06	.10	.10	.10	.08	.10	.14	.10	.15	.09	.15
10,100 lin. ft. 1½-in. w.i. galvanized pipe rail	.50	1.00	.50	1.00	.20	1.00	.90	1.25	1.00	.95	1.00
7,400 sq. ft. gratings	1.50	1.80	2.25	2.00	1.20	2.00	1.20	2.50	2.00	1.75	2.00
1,930 sq. ft. vault lights	2.00	2.00	1.75	2.00	1.80	2.00	2.00	2.00	2.00	2.25	2.00
2,530 sq. yds. sidewalks, restored	1.50	2.00	2.25	2.00	1.70	2.00	4.50	3.00	2.75	3.50	2.50
15,800 sq. yds. roadways, restored, temporary	1.50	1.50	2.00	2.00	1.20	2.00	1.10	3.00	2.00	3.00	1.00
17,730 lin. ft. ¾-in w.-i. electric conduits	.15	.10	.10	.20	.18	.10	.10	.30	.30	.30	.10
480 lin. ft. 1½-in. w.-i. electri conduits	.20	.20	.15	.30	.20	.25	.20	.45	.45	.45	.15
260 lin. ft. 2-in. w.-i. electric conduits	.25	.30	.20	.50	.30	.30	.24	.60	.60	.60	.25
430 c.-i. outlet boxes, each	.50	1.00	.50	1.20	.75	1.00	7.00	1.00	1.00	1.00	1.50
550 lin. ft. 6-in. c.-i. pipe and fittings	1.50	2.00	2.00	2.00	1.70	1.00	1.10	2.50	2.00	2.00	1.75
3,000 lin. ft. 15-in. vitrified sewer pipe	5.00	4.00	4.00	4.00	4.00	3.00	4.10	6.00	5.00	3.50	3.50
550 lin. ft. 18-in. vitrified sewer pipe	6.00	6.00	5.00	5.00	4.00	5.00	.20	7.00	6.00	4.00	4.00
1,300 lin. ft. sewer egg-shaped masonry, 3 ft. 6 in. × 2 ft. 4 in.	8.00	10.00	8.00	15.00	12.00	8.00	6.00	15.00	10.00	9.50	7.00
1,210 lin. ft. sewer circular masonry, 6-ft.	20.00	24.00	25.00	24.00	16.00	20.00	14.00	25.00	25.00	24.00	14.00
250 lin. ft. sewer circular masonry, 6 ft. 6 in.	25.00	30.00	28.00	28.00	22.00	25.00	16.00	28.00	28.00	25.00	15.00
6,200 lin. ft. maintaining 1-track electric railroad	12.00	10.00	5.00	18.00	15.50	18.00	10.00	18.00	15.00	20.00	20.00
100 lin. ft. 4-in. water pipe	.75	1.20	.75	.70	.80	1.00	1.00	1.25	1.00	1.20	.50
360 lin. ft. 6-in. water pipe	1.25	2.00	1.00	.90	1.15	1.10	2.00	1.50	1.25	2.00	1.00
1,055 lin. ft. 12-in. water pipe	1.50	3.30	1.50	1.40	2.75	1.25	4.10	2.00	1.75	3.30	2.50
60 lin. ft. 16-in. water pipe	3.00	3.60	2.50	1.80	3.50	3.00	5.25	2.50	2.25	3.75	3.50
330 lin. ft. 4-in. gas pipe	.75	1.20	.75	.60	.75	.75	1.00	1.00	1.00	1.20	.50
1,530 lin.ft. 6-in. gas pipe	1.25	2.00	1.00	.80	.85	1.00	2.00	1.25	1.25	2.00	1.50
10,50 lin. ft 8-in. gas pipe	1.35	2.40	1.25	1.00	1.40	1.00	3.00	1.50	1.50	2.40	2.00
950 lin. ft. 12-in. gas pipe	1.50	3.70	1.50	1.30	2.45	1.50	4.10	2.00	1.75	2.80	2.50
400 lin. ft. 20-in. gas pipe	3.00	4.00	2.50	1.80	4.90	3.00	6.20	2.50	2.25	4.00	3.50
30 tons straight c.-i. hub and spigot pipe, deliv'd	40.00	35.00	30.00	30.00	25.00	38.00	33.00	40.00	40.00	30.00	25.00
8 tons special c.-i. and hub spigot pipe, deliv'd	70.00	80.00	60.00	70.00	57.00	70.00	73.00	70.00	70.00	70.00	50.00
1,150 lin. ft. 8-in. air pipe, in place	2.00	1.20	2.00	1.50	.60	1.00	2.00	2.00	2.00	2.00	3.50
100 lin. ft. 8-in. new air pipe, delivered	2.00	1.00	1.00	1.50	3.10	1.00	1.75	2.00	2.00	1.50	2.00
155,300 duct ft. electric ducts	.15	.15	.30	.35	.50	.35	.70	.35	.25	.18	.30
Totals	$1,961,997	$2,090,334	$2,112,631	$2,101,972	$2,248,989	$2,266,679	$2,570,970	$2,626,506	$2,634,404	$2,637,877	$2,711,381

Readers' Wants

If you are in the market for material, equipment or supplies, and fail to find it in our advertising pages, send us full particulars, and we will gladly put you in touch with the right parties.

Railway Supplies, etc.—Winnipeg, Man.—The Standard Equipment & Supply Co., P. O. Box No. 525, desire catalogs of builders, contractors and railway supplies.

Oil Mills.—New York, N. Y.—Catalogs and export prices f. o. b. New York, are wanted for oil mills such as may be used for grinding palm kernels to obtain oil, by Suffern & Co., 90 Wall St.

Tapping Machine, Etc.—Louisville, Ky.—Edwin S. Larson, 1109 Hancock St., wants prices on a tapping machine for making 6-in. connections to a water main under pressure; also 16 6-in. sleeves.

Weaving Machines.—New York, N. Y. —Information is desired by Suffern & Co., 90 Wall St., regarding manufacturers of machines for weaving or plaiting strips of palm or fibre used in the making of palm mats, such as are used for covering bales and the making of bags.

Trek Chains.—New York, N. Y.—Suffern & Co., 90 Wall St., desires information egarding manufacturers of trek chains. A customer in Africa writes as follows: These chains are intended for 2, 4, 6 and 8 oxen, respectively. They are of the following sizes: ¼, ⅜, 5/16 and 7/16-in. by 8 ft.; they must be tested by some official body of your country and the test certificate to be submitted when exhibiting a sample and quoting.

INDUSTRIAL NOTES.

Monks & Johnson, Architects and Engineers, 7 Water St., Boston, are associated with Henry F. Keyes, Architect, 161 Devonshire St., Boston, in the preparation of plans for certain large industrial developments.

Five hundred new cars have been ordered by the Philadelphia Rapid Transit Co. of the pre-payment type now in operation on the 12th and 16th St. lines. The purchase of these cars will mean an expenditure of $2,500,000.

Monks & Johnston, Architects and Engineers, 7 Water St., Boston, are associated with Henry F. Keyes, Architect, 161 Devonshire St., Boston, for the preparation of plans and specifications for certain large industrial developments.

The John A. Roebling Sons Co., Trenton N. J., states that the reports of the damage caused by fire on Dec. 2 have been greatly exaggerated. One shop, only, was destroyed, and the other shops have already made plans to take over the work.

The Annual Convention of the National Gas & Gasoline Engine Trades Ass'n was held in Cleveland, Ohio, last week. About 150 members were present. An address was delivered by C. E. Adams, Pres. of the Cleveland Chamber of Commerce. There was a general discussion on gas engine reliability, economy, etc.

The leading manufacturer of wire advanced prices $1 per ton early this week. The new price of the American Steel & Wire Co. for nails is $1.55 base per 100 lbs., and on plain wire is $1.35 base per 100 lbs. Both of these prices are f. o. b. mill Pittsburgh. The demand for wire during the last fortnight has shown a decided gain.

The Alan Wood Iron & Steel Co., Philadelphia, Pa., has received a charter and has been incorporated at $9,000,000. This includes the merger with the steel plants at Conshohocken and Ivy Rock, Pa. The officers of this company are Richard G. Wood, Pres.; Jonathan R. Jones, Vice-Pres. and Treas., and W. W. Lukens, Secy.

An international engineering and machinery exhibit will be held at the Olympia, London, October, 1912. The committee is taking steps to insure the attendance of buyers from all British Colonies and it is hoped that there will be many Americans and other visitors. Invitations are now being sent out so that visitors from different countries can make sure of visiting this exposition.

The Punching and Shearing Machines exhibited at the International Exposition, Turin, Italy, by Henry Pels & Co., 90 West St., New York, were awarded two Grand Prix. The exhibit included nine power machines for heavy duty, and a number of hand machines. Among the power machines exhibited were a 1-stroke beam-shear; a beam-shear combined with punch, a single ended coping machine; a large bar shear; a triple combined punch, plate shear and bar cutter; a scrap shear, and a newly patented beam shear for cutting structural shapes without waste of material.

The National Employment Exchange is issuing its Second Annual Report. This exchange, as will be recalled, was started by a number of philanthropically minded men of New York City with the idea of its eventually being placed on a paying basis. Although the labor market has been unsatisfactory during the last year and the company is only in its second year of operation, the net loss to the society for applicants in the mercantile branches has been reduced from over $14 to slightly less than $5 and the total loss from operation of this branch was $6,500 in 1911, compared with $8,800 the previous year, when it operated only nine months. Through the efforts of this organization 1,331 applicants to mercantile branches secured employment compared with 537 in nine months of the previous year. In this total was included one civil engineer, 60 draftsmen and three electrical engineers. Although the percentage of orders filled for manual labor was larger in 1911 than in previous years the total was less, owing to the slackness of work in many sections of the United States, particularly work on which contract laborers are used. The Manual Labor plant is now located at 56 Cooper Square, New York, and the General Mercantile Branch at 30 Church St., New York.

National Association of Road Material and Machinery Manufacturers. — An organization under this name was effected at the Richmond road congress, Nov. 21. The charter members of the association include the leading concerns in the United States engaged in the road building industry. Member companies must be road material or machinery manufacturers, and not primarily contractors or dealers.

Mr. W. T. Beatty, of the Austin Mfg. Co., Chicago, was elected President of the Association; S. Jones Philips, of the American Road Machinery Co., vice-president; Daniel T. Pierce, of the Barber Asphalt Paving Co., secretary and treasurer. The office of the association will be 32 Liberty St., New York.

Those who have been elected and accepted representation on the Board of Directors of the Association are: Nat. Tyler, Jr., Monarch Road Roller Co.; B. C. Hvass, Charles Hvass Co.; H. P. Goodling, A. B. Farquhar Co.; Henry Fisher, Standard Oil Co.; Charles P. Price, American Tar Co.; R. K. Pierce, Solvay Process Co., and J. S. Robeson, Robeson Process Co. The Texas Co., Studebaker Corporation, Watson Wagon Co., and four other manufacturers will have representation on the board.

Annual meetings will be held in connection with a yearly exhibit under the auspices of the association. It is hoped

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LIST OF CONTRACTS PENDING

Plans and Specifications on File.

The following plans (P.) and Specifications (S.) are on file for reference only unless otherwise noted at the office of The Engineering News Publishing Co., 220 Broadway, New York.

Bids close.		Noted in issue of
12-16	Magazine bldgs., Bremerton, Wash. ....(S)	11- 9
12-20	Distrib. system, Fort Logan, Colo. ....(S.)	11-30
12-23	Concrete floor, etc., Fort Lafayette, N. Y. ....(S.)	11-30
12-28	Bridge, Winnineg, Man.... ....(P. & S.)	12-7
12-30	Roof trusses, Washington, D. C. ....(S)	12-14
12-30	Ditches, Memphis, Tenn.(S.)	12-14

Light, Heat and Power Plants.

Bids close.		Noted in issue of
At once,	Engine and generator, Somerset, Ky.	12-14
12-15	Power building and equipment for electric-light system, Galva, Iowa	12- 7
12-16	Power house, Patton, Cal.	12- 7
12-16*	Materials, (See Proposals) Philadelphia, Pa.	11- 9
12-18	Heating, ventilating and electric generating apparatus, Washington, D. C....	12-14
12-18	Lighting system, Washington, D. C..................	12-14
12-19	Wiring, Storrs, Conn......	12-14
12-19	Hot-water heating apparatus, Otisville, N. Y.......	12-14
12-20	Power plant, additions to system and water-works system	12-14
12-21	Wiring, New York, N. Y...	12-14
12-22	Wiring, etc., New York....	12-14
12-22	Wiring and fixtures, Leavenworth, Kan.	12- 7
12-27*	Heating and ventilating apparatus, San Diego, Cal....	11-30
12-27	Lighting fixtures, Washington, D. C..............	12-14
1- 2	Turbine engine, Anderson, Ind.	12-14
1- 3	Wiring, Placerville, Cal....	11-30

Bridges.

Bids close.		Noted in issue of
12-14	Bridge, Bendersville, Pa...	12-14
12-14	Bridge, Lawrence, Kan.....	12-14
12-15	Bridge, repairs, Hokendauqua, Pa.	12- 7
12-15	Bridge Massillon, Ohio......	11-30
12-15	Bridge, Columbus, Ohio.....	11-30
12-16	Bridges, Kalispell, Mont...	12- 7
12-18	Bridge, Waynesburg, Pa....	12- 7
12-18*	Bridge, Fulton, N. Y.......	12- 7
12-18	Bridge, New Brunswick, N. J.	12- 7
12-18	Drawbridge, South River, N. J.	11-30
12-18	Bridge, Oswego, N. Y.......	11-30
12-18*	Bridges, Fulton, N. Y.....	11-23
12-18	Bridges, Houston, Tex.....	12- 7
12-18	Bridges, Spotsylvania, Va..	12-14
12-18	Bridges, Council Bluffs, Ia.	12-14
12-19	Bridge, Seattle, Wash......	12- 7
12-21	Bridge, Miamisburg, Ohio..	12- 7
12-27*	Bridge, Baltimore, Md.....	12-14
12-28	Bridge, Winnipeg, Man....	12- 7
12-28*	Bridge, New Orleans, La....	11-16
12-28*	Bridge, Winnipeg, Man. (See Proposals)	12-14
1- 3	Bridge, Goldsboro, N. C.....	11-30
1- 4	Bridge work, Preston, Iowa.	11-23
1- 4	Bridges, New Hampton, Ia.	12-14
1-15	Bridge, Atlanta, Ga........	12-14
1-15	Viaduct, Atlanta, Ga.. ..	11-23
1-15*	Bridges, Porto Rico (U. S. Poss.)	12- 7
2- 5	Bridge, Guadaloupe, Cal....	12- 7

Buildings.

Bids close.		Noted in issue of
12-14	School, Los Angeles, Cal..	12-14
12-18	Building, Richmond, Va....	11-30
12-18	School, Cleveland, Ohio....	12- 7
12-19	Hospital, Lima, Ohio......	12- 7
12-19	Museum, Columbus, Ohio...	11-30
12-20	U. S. post-office, Westfield, Mass.	11-16
12-22*	Plumbing, Fort Snelling, Minn.	11-30
12-27	U. S. post-office, Miami, Fla.	11-16
12-27*	U. S. post-office, San Diego, Cal.	11-23
12-28	U. S. custom house, remodel, Boston, Mass	11- 2
12-29-30	Buildings, Hawaii, (U. S. Poss.)	11-30
1- 1	Hospital, Salem, Ohio......	12- 7
1- 1	Court house, Jonesboro, Tenn.	12- 7
1- 4	Hospital, Louisville, Ky....	11-23
1- 4	U. S. post-office Laporte, Ind.	11-30
1- 5	U. S. post-office, Maryville, Mo.	11-30
1- 6	U. S. post-office, Ellsworth, Me.	11-30
1- 9	Court house, Mattoon, Ill..	12- 7
1-10	U. S. post-office, Gaffney, S. C.	12- 7
1-12	U. S. post-office, Mansfield, Ohio	12- 7
1-13	U. S. post-office, Bismarck, N. Dak.	12- 7
1-16	U. S. post-office, Frostburg, Md.	12-14
3-20	U. S. post-office, Juneau, Alaska	12- 7

Water-Works.

Bids close.		Noted in issue of
12-15	Water supply, Victoria, B.C.	12- 7
12-15	Pump house, tower, etc., Neepawa, Man	11- 2
12-15	Water-works, Loreauville, La.	11-23
12-15	Water system, Las Cruces, N. Mex.	11-30
12-15	Water-works, Bennington, Okla.	11-30
12-15	Filters, Fort Mason, Cal....	11-30
12-18	Reservoir, Tecumseh, Neb..	12-14
12-18	Piping, etc., Cleveland, O..	12-14
12-18	Pump, Mobridge, S. Dak...	12-14
12-18	Water pipe, etc., Winnipeg, Man.	12-14
12-19	Pumping station, etc., Charlotte, N. C..................	12-14
12-20	Watermains, Normal, Ill...	12-14
12-20	District system, Fort Logan, Colo.	11-30
12-20*	Pipe valves, etc., Quebec, Que.	11-30
12-20	Pumps, Chicago, Ill.........	11-23
12-20	Pumping station, Kingston, S. C.	12- 7
12-20	Water additions, Washington, Ga.	12- 7
12-27	Water extensions, Vancouver, B. C.	11-30
12-28*	Water pipe, etc., Talahassee, Fla.	12-14
12-29	Pump, Winnipeg, Man.....	12-14
1- 8	Watermains, Euclid, Ohio..	12- 7
1-22*	Pump, Dubuque, Iowa.....	12-14

Sewers.

Bids close.		Noted in issue of
12-15	Sewers, St. Louis, Mo.....	12-14
12-16*	Sewer system, Pleasant Ridge, Ohio	11-23
12-18	Sewer, Toppenish, Wash...	12- 7
12-18	Sewers, No. Yakima, Wash.	12-14
12-19	Sewers, Muskogee, Okla...	12-14
12-19	Sewers, Edenton, N. C.....	12- 7
12-20	Sewer pipe, Pryor Creek, Okla.	12- 7
12-20	Sewers, Baltimore, Md.....	12- 7
12-20	Sewer system, Unadilla, Ga.	12-14
12-20	Sewers, New York, N. Y...	12-14
12-20*	Pipe, Muskegon, Mich. (See "Proposals")	12-14
12-20	Sewer, Phillipsburg, N. J...	12-14
12-21	Sewers, Lorain, Ohio.......	12-14
12-21	Sewers, Cincinnati, Ohio...	12-14
12-28	Sewers, Fostoria, Ohio.....	12-14
12-29	Sewer system, Kingstree, S. C.	12- 7
12-30	Sewer, Yonkers, N. Y......	12-14
1- 2	Sewer, Waco, Tex.........	12-14
1- 4	Sewers, Union Springs, Ala.	12-14
1- 6	Sewer system, Fallon, Nev.	12-14
1-15	Sewage disposal plant, Springfield, Mo.	12- 7
3- 1	Sewers, Mattoon, Ill........	12- 7

Streets and Roads.

Bids close.		Noted in issue of
12-15	Sidewalks, Salt Lake City, Utah	12-14
12-15	Paving, Louisville, Ky.....	12-14
12-16	Walks, Olympia, Wash....	12- 7
12-18	Paving, Burlingame, Cal...	12- 7
12-18	Paving, Kansas City, Kan.	12- 7
12-18	Gravel roads, Huntingdon, Ind.	12- 7
12-18	Soil work, Boston, Mass...	12-14
12-18	Street improvement, Santa Monica, Cal.	12-14
12-18	Paving, Cincinnati, Ohio...	12-14
12-19	Street impvt., Berkeley, Cal.	12-14
12-19	Brick road, Belle Valley, O..	11-30
12-20	Paving, Brooklyn, N. Y....	12-14
12-21	Improving streets, Dayton, Ohio	12-14
12-21	Paving, etc., Hamilton, Ala.	12- 7
12-22	Paving, etc., Cincinnati, O.	12- 7
12-22	Street impvt., Indianapolis, Ind.	12-14
12-22	Paving, New York, N. Y....	12-14
12-23	Grading and paving, Pleasant Ridge, Ohio.............	12-14
12-25	Paving, Hannibal, Mo......	12-14
12-27	Road, Anderson, Ind.......	12-14
12-27	Paving, Jacksonville, Fla..	12- 7
12-27	Paving, Lincoln, Neb......	11-30
12-29	Paving, Jacksonville, Fla..	12-14
1- 1	Road, Huntington, Ind.....	12-14
1- 2	Gravel road, Vincinnes, Ind.	12-14
1- 2	Macadam roads, Logansport, Ind.	12-14
1- 2	Roads, Fowler, Ind........	12-14
1- 2	Macadam road, Bloomfield, Ind.	12-14
1-15	Viaduct, Atlanta, Ga.......	11-23
1-18	Gravel road, Portland, Ind.	12-14
2- 1	Paving, Rochelle, Ill........	11-23

Miscellaneous.

Bids close.		Noted in issue of
12-15	Levee work, Shreveport, La.	12- 7
12-15	Drainage, Clarence Creek, Ont.	12- 7
12-15*	Hopper suction dredge, British West Indies (Foreign)..	11- 9
12-15*	Dredging, New York.......	11-23
12-15*	Lighthouse, Baltimore, Md.	11-23
12-15	Tug, barges, etc., Winnipeg, Man.	11-30
12-15	Telephone poles, Regina, Sask.	12-14
12-16	Drainage district, Edwardsville, Ill.	12-14
12-16	Magazine buildings, Bremerton, Wash.	11- 9
12-16*	Light station, Phila., Pa...	11-16
12-16*	Fill, Stamford, Conn........	12- 7
12-18	Elevators, etc., New York..	12-14
12-18	Cement, Winnipeg, Man...	12-14
12-18	Fire station, etc., Newark, N. J.	12-14
12-18	Fire hose, Hartford, Conn..	12-14
12-18	Piles and lumber, Panama, (U. S. Poss.)	12-14
12-19	Projectiles, Wash., D. C...	12-14
12-19	Immigration station, New Orleans, La.	11-23
12-19*	Dump cars, Winnipeg, Man.	11-30
12-19	Jetty, Ottawa, Ont.........	12- 7
12-19	Ditch, Logan, Iowa........	12- 7
12-20	Channel, Bedford, Iowa....	12- 7
12-20	Ditch, Newton, Iowa	11-30
12-20	Barge canal, Albany, N. Y..	11-30
12-20	Drain, Newport, Ind........	12-14
12-21	Elevators, New York	11-30
12-22	Elevator, Fort D. A. Russell, Wyo.	12-14
12-23	Concrete floor, etc., Fort Lafayette, N. Y.............	11-30
12-23*	Steel forgings, etc., Wheeling, W Va.	11-30
12-26	Steel, Washington, D. C...	12-14
12-26*	Cable, New London, Conn.	12-14
12-27	Drainage ditch, Auburn, Neb.	12-14
12-27*	Dredges, San Francisco, Cal.	10- 5
12-28	Tile drain, Rockwell City, Iowa	12-14
12-29	Ditch, Red Lake Falls, Minn.	12-14
12-30	Ditches, Memphis, Tenn...	12-14
12-30	Roof trusses, etc., Washington, D. C...............	12-14
12-30*	Gate machines and pumps, Panama......(U. S. Poss.)	11- 2
12-30*	Repairing jetty, Galveston, Tex.	12- 7
1- 2*	Dredging, Dallas, Tex.....	12- 7
1- 4	Battleships, Wash., D. C...	11- 9
1- 4	Drainage work, Eldora, Ia.	12-14
1- 4	Temperature system, Bellingham, Wash.	12-14
1- 6	Material for rack railway, etc., Panama (U. S. Poss.).	12-14
1- 8*	Dredging, Wash., D. C.....	12-14
1-11	Pier, San Francisco, Cal...	12-14
1-15*	Timber, Detroit, Mich......	12-14
1-15*	Lock gates, Detroit, Mich..	12-14
1-15*	Breakwater. — Bar Harbor, Me.—See "Proposals."	12-14
1-19	Monument, Little R'k, Ark.	12-14
1-13*	Steel barges. — Cincinnati, Ohio.—See "Proposals." ...	12-14
2- 1	Gunboats, Wash., D. C.....	11-23
2- 6	(1912) Cranes, rails, Uruguay ....(Foreign)	11- 2
4-23*	(1912) Harbor work, Chile..	——

Examinations.

Examination date		Noted in issue of
12-28	Assistant mining engineer, Washington, D. C...........	11-30
1-10	Surveyor. — Washington, D. C.	12-14

that arrangements can be made for the annual exhibit at joint conventions of the principal good roads organizations.

An important announcement in railway circles was made this week when it was learned that the New York Central & Hudson River R. R. had purchased from the New York, New Haven & Hartford the control of the New York, Ontario & Western Ry. This latter road is a short line of about 400 miles, from New York to Oswego on Lake Ontario. It secures its entrance to New York City over the track of a New York Central subsidiary, the West Shore, and runs on these tracks about 50 miles. Its Western outlet is also over the tracks of the New York Central subsidiary, the Rome, Watertown & Ogdensburg. The chief traffic of this road is anthracite coal and it has recently completed some important double-tracking on its Scranton Division leading to the anthracite mines of the Scranton region. In exchange for the Ontario & Western, the New York Central gave the New York, New Haven & Hartford control of the Rutland R. R. These transactions are in line with recent developments in the railway field, notably when the New Haven road agreed to assume a part of the obligations of the Boston & Albany. It indicates a disposition on the part of these two large roads to confine their activities to their own respective territories and intensively develop that territory. The New York Central remaining in the state of New York and territory to the West, while the New Haven is apparently taking all the railways of the New England States.

The three Power Companies, which are located on the Canadian side of the river at Niagara Falls, are all engaged at the present time in making extensive additions to their plants which will require an aggregate outlay of several million dollars. The total increase in power producing capacity which will result will amount to 71,500 HP.

The Canadian Niagara Power Co., the Canadian branch of the Niagara Falls Power Co., is building an addition to its power-house to cost $150,000. This will provide requisite space for the installation of generators to produce all the additional power permitted by its charter. Only one additional unit of 10,000 HP. will be installed at this time, however, the other units to be added as required. The present plant is comprised of six 10,000-HP. generators—and most of the power now generated is transmitted to Buffalo for consumption there. The company's charter permits the diversion of 11,000 cu. ft. of water per second. The amount of power produced which the company may export to the United States is fixed at 52,500 HP.

The Ontario Power Co. is completing its second pipe line, 188 ft. in diameter, of steel, through which additional supplies of water will be received from the intake forebay at the head of the rapids above the Falls and conveyed to the turbines in the power-house of the company at the foot of the "Horseshoe" Falls, under Table Rock. Work is now under way on two additional penstocks extending from the new receiving pipe at the top of the cliff to the power-house underneath. Upon completion two generating units of 12,000 HP. each will be installed which, with the ten 12,000 HP. units now in operation, will give the plant a total producing capacity of 144,000 HP. The Canadian Power Co. now furnishes the Hydro-Electric Commission under contract with current for distribution to Canadian cities and towns by the Canadian Government transmission lines. The Electric Development Co., whose current is marketed in Toronto, is completing an addition to its power-house and will soon take bids for one 12,500-HP. generator equipment. This equipment when installed will increase the output of the plant to 62,500 HP. The present equipment consists of four generating units of 12,500 HP. capacity each. The power development limit of this company is fixed at 125,000 HP., whereas the development limit of the other companies is determined by the amount of water diversion specified by their charters. It is estimated that the Canadian Government will derive a revenue of $125,000 during the current year from the power companies, owing to the increased development. This income is to be devoted to the further improvement and beautification of Victoria Park at the Canadian Falls and the completion of the Boulevard along the Niagara River between Victoria Park and Fort Erie, opposite Buffalo. The power companies have agreed that all traces of construction work shall be removed by next summer and the park restored to its former condition.

The Fifth Annual Compilation of trade conditions by "American Industries" has recently been issued. The general disposition of men of affairs to condemn present political activities and to hold it responsible for all of the trouble to which business is heir, is refuted in a refreshing statement by J. Phillip Bird, General Manager of the National Association of Manufacturers, who writes as follows:

"The general belief that public unrest and agitation such as we apparently are experiencing indicate a lack of political knowledge is not true, in my opinion. On the contrary it is quite apparent that the general public is showing a keen and intelligent interest in everything concerning their immediate welfare, and this, of course, includes both national and local politics.

"Strange to say, one of the most convincing proofs is the vogue of yellow journalism and muck-raking literature, if we can call it such. The popularity in the past of this form of journalism was due not so much to a desire for sensationalism as to the fact that, crude as the method was, it was the only means of expressing unsatisfactory economic conditions.

"Another interesting proof to me is the recent socialistic vote which does not show any evidence of an overturning of our fundamental system of government, but rather the recording of the protest of those who exercise the right of franchise against the policies of both long-established political parties.

"There are two things a republican form of government finds it difficult to combat—deep adversity and great prosperity—and probably the latter is in the long run the most harmful. Prosperity creates desires and ambitions beyond the means of the average man and often leads to discontentment. Adversity, without it spells panic and ruin, serves to concentrate a man's thought and activity upon himself and leaves little time for envy or inordinate ambition. It therefore seems to me that adversity in a nation or an individual may in some cases ultimately work for the good of the nation or the individual.

"These facts are evidenced by present conditions in this country. We have the West, which has enjoyed unbounded prosperity during the past generation, torn by radicalism and so-called progression. We find the North and East, after a period of prosperity, now becoming imbued with radicalism.

"On the other hand, the South, just recovering from trial and adversity unparelleled in our history, is conservative and giving strict attention to its legitimate business. It would be a strange coincidence if in as much as the South for the first time since the Civil War has in its power the balance of legislative enactment, it should be that section of the country destined to preserve the Union from a threatening self-destruction."

In a table showing the state of trade and probabilities of expansion in industries based on statements made by 10,000 manufacturers and business men, the majority of them show only slight or fair improvement compared with a year ago. Especially notable examples of unsatisfactory trade are the glass trade, including mirrors, plate and window glass; bridge construction, pig iron, railway building, unfinished machinery, lumber for building, burlap, cottons, bolts and nuts. The automobile trade is practically the only one where an improvement is shown and where the prospects for a marked increase in industry during 1912 is noted.

TRADE PUBLICATIONS.

CENTRAL POWER STATIONS.—Westinghouse, Church, Kerr & Co., 10 Bridge St., New York City. Paper; 6 × 9 ins.; pp. 49; illustrated.

This company has collected in this pamphlet a few examples of its work in the design and construction of central power plants. The methods of description is brief and to the point, being largely tabular.

TESTING MACHINES FOR ROAD MATERIALS.—Riehle Bros Testing Machine Co., 1424 No. 9th St., Philadelphia, Pa. Catalog "K." Paper: 9½ × 12 ins.; pp. 12; illustrated.

The several testing machines developed for the use of the U. S. Office of Public Roads in the testing of road-making materials are described in this pamphlet. The machines include impact-cementation, impact-toughness, abrasion, grinding, hardness, briquette-cementation, core-drill, diamond-saw, and crushing devices, etc.

THE LUTEN PATENTS ON REINFORCED-CONCRETE BRIDGES.—National Bridge Co., Indianapolis, Ind. Folder; 8½ × 11 ins.; illustrated.

AWARDING CONTRACTS ON CONCRETE BRIDGES. — National Bridge Co., Indianapolis, Ind. Paper; pp. 16; illustrated.

These two publications are issued by the National Bridge Co. of Indianapolis. The first gives a list of the patents issued to Prof. Daniel B. Luten, and owned by the company and states the position of the company with reference to these patents. The company states that during the past year 1,146 bridges have been erected under royalty contracts using the Luten designs, and that a total of 4,740 Luten design bridges have now been completed.

The second pamphlet discusses methods of letting contracts in open competition, and favors the plan under which the engineer in charge prepares general specifications covering the architectural features, external dimensions and unit stresses. Under this plan bidders are allowed to present their own detail designs.

For other Proposal Advertisements see pages
53, 54, 56, 57
of Advertisements and Construction News, page 270

REPAVING BLOOMFIELD AVENUE.

Montclair, N. J.

Sealed proposals will be received by the Town Clerk of the Town of Montclair in the County of Essex, at the Council Chambers in the Crane Building, in the Town of Montclair, on Monday evening, January 22nd, 1912, at eight P. M., and at no other time and place, for laying in Bloomfield Avenue, from the Borough of Glen Ridge line to the Borough of Verona line, a distance of eight thousand feet, more or less, and constructing therein an oblong granite block pavement on a six inch concrete foundation on both sides of the street railway tracks except one foot on each side of said tracks and to set blue stone curbing at each curb line in accordance with the plan, profile, specifications and contract to be seen and on file at the office of the Town Clerk in the Crane Building, Bloomfield Avenue, Montclair, N. J.; said contract, plans, profile and specifications are to be examined by the bidder, and the successful bidder will be required to execute the contract and bonds therein required in form and manner as on file in the Town Clerk's Office.

Bidders are not to state any price for materials and work for which there is a fixed price provided in the specifications.

The following is the amount (estimated only approximately) of the work to be done and the materials to be furnished in the construction of said work and upon which bids will be compared.

Estimate of Quantities.

Granite Block Pavement	34,300 sq. yards
New Curbing	13,700 lineal feet.
Old Curbing reset	2,000 lineal feet
New Corners, per foot	58 in number

The contractor to bid on the above items separately per each unit.

Each proposal must be enclosed in a sealed envelope properly endorsed with the name of the bidder and of the improvement and directed to The Town of Montclair in the County of Essex.

Bidders will state their prices in writing as well as in figures.

Each bid to be accompanied by a certified check of ten thousand dollars, payable to Samuel H. Wenck, Treasurer of the Town of Montclair, or by a surety bond of twenty thousand dollars to the Town of Montclair in the County of Essex. Said bond is to be to the effect following: That if the contract be awarded to the person or persons making the proposal, they will, upon its being so awarded, become his, its or their surety for the faithful performance of the work in form and manner required by the filed contract, and that, if the person or persons omit or refuse to execute such contract, they will pay to the Town of Montclair in the County of Essex any difference between the sums to which he or they would have been entitled upon completion of the contract, and that which the Town of Montclair in the County of Essex may be obliged to pay the person or persons by whom such contract shall be executed. Such surety bond shall be by a company authorized to do business in New Jersey. The certified check shall be received and held on the same conditions as the aforesaid bond.

The Town Council of the Town of Montclair reserve to themselves the right to accept or reject any or all proposals for the above work, as they may deem best for the interest of the Town.

By direction of the Town Council of the Town of Montclair in the County of Essex.

Dated December 12th, 1911.

HARRY TRIPPETT,
Town Clerk, Montclair, N. J.

U. S. ENGINEER OFFICE, Room 415, Custom House, Cincinnati, O., December 13, 1911.—Sealed proposals for constructing two steel deck barges and one steel open barge for Kentucky River, Kentucky, will be received at this office until 12 o'clock noon, standard time, January 13, 1912, and then publicly opened. Information on application. JOHN C. OAKES, Maj., Engrs.

U S. ENGINEER OFFIC 537 Congress Street, Portland, Me., D mber 12, 1911.—Sealed proposals for struction of breakwater near Bar Harb Me., will be received at this office u 12 M., January 15, 1912, and th publicly opened. Information on app ion. W. E. CRAIGHILL, Lieut. Col., grs.

Situations Open
(Or Vacant)

WANTED—Structural draftsm familiar with construction of stee arges, as leading man; also detaile Address, stating experience and sa desired, "B. A. 24," Engineering ews, New York. 24-3t

EXAMINATIONS

Space under this heading is sold for notices of Civil Service Examinations, etc.

Municipal Civil Service Commission, 299 Broadway, New York, December 13, 1911.

PUBLIC NOTICE IS HEREBY GIVEN that applications will be received from

Wednesday, December 13, to 4 p. m., Thursday, December 28, 1911,

for the position of TOPOGRAPHICAL DRAUGHTSMAN ($1,200 per annum).

No application delivered at the office of the Commission, by mail or otherwise, after 4 p. m., December 28, will be accepted. The examination will be held on THURSDAY, JANUARY 18, 1912, at 10 a. m.

The subjects and weights are: Technical, 5; Experience, 2; Mathematics, 2; Neatness, 1. 75% required on technical paper and 70% on all.

Applicants must be citizens of the United States. The requirement of residence in the State of New York is waived for this examination; also the requirement that vouchers shall be residents of the City of New York, and applications bearing the certificates of four persons resident or engaged in business elsewhere will be accepted.

A number of vacancies exist. Salary $1,200 per annum. Minimum age, 21 years.

24-1t FRANK A. SPENCER, Secretary.

For Sale

Contractors' Equipment

FOR SALE

AT ITHACA, N. Y.

Waterworks will be finished in near future. Plant can be seen in operation.

- 2 Double Drum Hoisting Engines.
- 2 Boom Derricks.
- 1 Chicago Cube Mixer.
- 1 Aerial Mixer.
- 1 Portable Champion Crusher.
- 1 Farquhar Portable Compound Engine with Boiler.
- 1 Dump Bucket.

Pumps, Pipe, etc.

Ready for delivery on completion of contract.

B. G. COON CONSTRUCTION CO.
ITHACA, N. Y. 24-1t

Traction Engine

FOR SALE

One 45 H. P. 9x10-inch cylinder Simple Traction Engine, complete. Has been used less than three months. Address

P. O. BOX 369, MACON, GA. 24-2t

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